LEACH®
COMPANY

ALPHA•BETA•DELTA PARTS MANUAL

Over Serial Number 3500

BUILDING THE BEST

TO ORDER PARTS

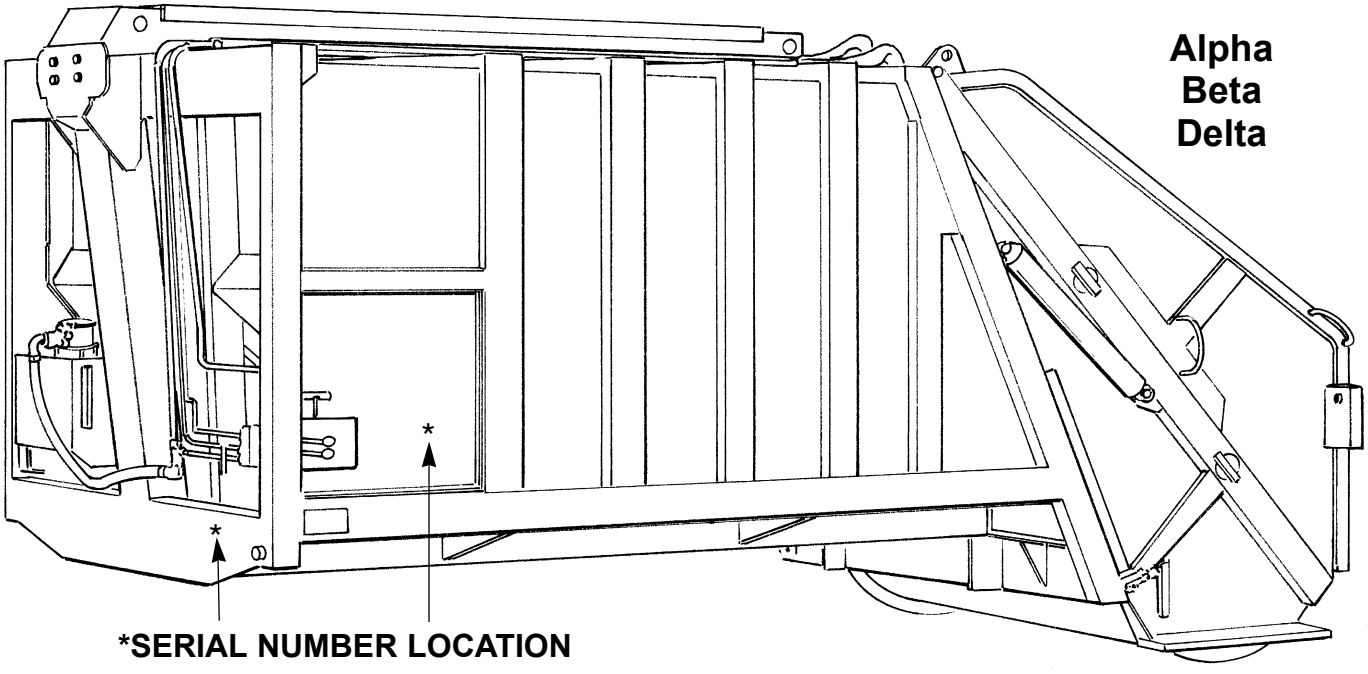
Contact your local Leach Signature Original Factory parts distributor

Your Authorized Leach Distributor

provide the following information:

A. Company name
B. Date
C. Your order number
D. Routing instructions
E. Quantity, part number and description
*F. Model and serial number of unit

Accept only Leach Signature Original Factory Parts.



©Copyright Leach Company; 2737 Harrison Street, P.O. Box 2608, Oshkosh, Wisconsin 54903-2608 November 15, 2001

PREFACE

The Alpha, Beta and Delta rear loaders over serial number 3500 share many safety, operational and design similarities. This manual combines the necessary information for these models into one publication.

FOREWARD

The Leach Company has been a leader in the refuse industry for over 100 years. The Leach Alpha, Beta and Delta are the industry standard for both quality and performance. We at the Leach Company are justifiably proud of the quality engineering, material and workmanship that goes into each and every packer we produce. This commitment to quality extends to the best parts, service and distributor organization in the industry.

One area of great importance to us at the Leach Company is your safety. This unit was built in accordance with the American National Standards Institute (ANSI) atandard for Mobile Refuse Collection and Compaction Equipment - Safety Requirements, ANSI Z245.1 - 1992. Before operating this unit please read and understand the safety precautions found in Section 1 of the Service and Operators manual. They are important and are provided to assist you in the safe operation of the unit.

This manual was produced with the latest information available at the time of publication. We do, however, reserve the right to redesign and/or discontinue the manufacture of parts, components or assemblies at any time. The Leach Company has an aggressive manual and product improvement program. In any conversation or correspondence dealing with information provided in any Leach manual please refer to the part number of that manual located in the lower right hand corner of rear cover.

The manuals provided with the unit are considered a permanent part of the unit and should be included in event of a resale. Additional manuals are available, free of charge, from your local authorized Leach distributor. These manuals should be kept readily available for easy reference. We ask that if you have comments or suggestions concerning this manual please contact us at (920) 231-2770. We are here to be of service to you, our valued customers.

LEACH Signature™ Original Factory Parts

WARRANTY

LEACH®
COMPANY

Refuse bodies manufactured by Leach Company, ("Company") are supplied and sold under a Limited Warranty that they are and will remain free of defects in workmanship or material for a period of six (6) months from the date of original sale under reasonable conditions of use and operation, providing required planned maintenance services are performed. Extended warranty packages are available for purchase. If a failure occurs during said period because of such defect in the opinion of the Company, the component or part shall be repaired or replaced by an authorized Leach Distributor at no cost to the customer provided the unit is brought to the distributor's service facility. After three (3) months, performance of adjustments or the replacement of wear/expendable components is not covered under warranty. This limited warranty is the sole and exclusive warranty of the Leach Company.

THE COMPANY MAKES NO WARRANTY AS TO MERCHANTABILITY, FITNESS FOR USE, LEGALITY OF OPERATION IN ANY JURISDICTION OR ANY IMPLIED WARRANTY OF ANY KIND OR NATURE. THE COMPANY SHALL NOT BE LIABLE FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR NATURE, OTHER THAN ITS LIMITED WARRANTY OF REPLACEMENT HEREIN. NO OTHER PERSON, FIRM, OR CORPORATION CAN BIND THE COMPANY TO ANY WARRANTY OTHER THAN HEREIN ABOVE STATED.

To validate the new unit warranty, an authorized Leach Distributor must have completed a predelivery inspection before the unit is placed into service, and the delivery report form signed by both the customer and the distributor must be submitted to the Leach Service Department.

Because Company products are engineered to work only with genuine Company parts, this limited warranty will be void and of no effect if: (a) Company products are modified other than as done at its factory or as authorized to be done by the factory in writing; or (b) Parts or assemblies of any other manufacturer are used as substitutes for genuine Company parts.

Genuine Leach replacement parts, components and assemblies are also sold under a Limited Warranty to be free from defects in workmanship or material for a period of six (6) months. This is a replacement only warranty and the item must be returned to the Leach distributor for exchange. The labor to replace or repair the part shall be the responsibility of the customer. There is no warranty on expendable items, wear components or used parts.

Leach Company reserves the right to redesign and/or discontinue the manufacture of parts, components and assemblies at any time.

TABLE OF CONTENTS

ORDERING PARTS.....IFC
PREFACE.....I
FORWARD.....II
WARRANTY.....III
TABLE OF CONTENTS.....IV
TORQUE VALUES CHART.....V

SECTION 1 Tailgate
Decals.....1-2
Tailgate Weldment.....1-5
Tailgate Assembly.....1-9
Tailgate Electrical.....1-12
Rear Controls.....1-16
Carrier and Packer Panel.....1-18
Tailgate Props.....1-20

SECTION 2 Body
Mud Guard Assembly.....2-1
Body Weldment-20 Yard.....2-3
Body Electrical.....2-5

SECTION 3 Pushout Panel
Pushout Cylinder Mounting.....3-1
Pushout Panel.....3-2

SECTION 4 Hydraulics
Tank Assembly.....4-1
Top and Front Hydraulics.....4-5
Pushout Cylinder Hydraulics.....4-7
Tube Supports.....4-8
Main Control Valve (MCV) Supply and Return.....4-9
Packer Cylinder Hydraulics-Alpha/Beta.....4-11
Packer Cylinder Hydraulics-Delta.....4-12
Carrier Cylinder Hydraulics-Alpha/Beta.....4-13
Carrier Cylinder Hydraulics-Delta.....4-15
Spin-On Filter (Optional) 407192.....4-16
Tailgate Lift Hydraulics.....4-17

SECTION 5 Valves
Front Control Valve (FCV) Installation.....5-1
Front Control Valve.....5-2
Valve-Tipper Control-Before AL/BE s/n 4226, DE s/n 5052.....5-3
Valve-Tipper Control-After AL/BE s/n 4225, DE s/n 5051.....5-4
Valve- Regen.....5-5
Main Control Valve (MCV)-Alpha/Beta.....5-6
Main Control Valve (MCV)-Delta Before s/n 5053....5-8
Main Control Valve (MCV)-Delta After s/n 5052.....5-10

SECTION 6 Pumps
Leach PTO Pump 307451-01.....6-1
Leach Front Mounted Pump 204071.....6-2
Front Pump (Muncie).....6-3
Pump, Dry Valve (Typical).....6-5
Leach PTO Pump Mounting.....6-7
Hotshift PTO Controls.....6-9
PTO Controls, Air.....6-10

SECTION 7 Cylinders
Packer Ctlinder-Alpha 210658.....7-1
Packer Cylinder-Beta 406578.....7-2
Packer Cylinder-Delta 601366.....7-3
Carrier Cylinder-Alpha/Beta 210659.....7-4
Carrier Cylinder-Delta 210628.....7-5
Tailgate Lift Cylinder.....7-6
Telescoping Cylinder 210630-05- 25 Yard.....7-7
Pushout Cylinder 14, 16, 18, 20 Yard.....7-8
Container Lifting Device Cylinder 406582.....7-9
HCA Cylinder 407028.....7-10

SECTION 8 Mounting
Electrical Components.....8-1
Mounting Hardware-Before AL/BE s/n 4212, DE s/n 5059.....8-3
Mounting Hardware-After AL/BE s/n 4211, DE s/n 5058.....8-5
Speed Up (Electrically Operated).....8-7
Speed Up (Air Operated).....8-8

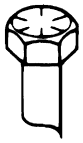
SECTION 9 Options
8000 Lb.Winch Assembly.....9-1
8000 Lb. Winch 100375 and Motor 101770.....9-3
12,000 Lb. Winch Assembly.....9-5
Hydraulic Motor 100597.....9-6
12,000 Lb. Winch 100596.....9-7
Latch and Guide Ear Assembly-Before AL/BE s/n 4046, DE s/n 5052.....9-9
Latch and Guide Ear Assembly-After AL/BE s/n 4045, DE s/n 5051.....9-11
Container Push Bar (CPB).....9-13
Container Lift Cylinder.....9-15
Container Lift Hydraulics.....9-17
Tipper Hydraulics, Dual Tippers.....9-19
Tipper Hydraulics, Single Tipper.....9-21
Fire Extinguisher Option.....9-23
Paper Basket Option.....9-24
Tool Box Option.....9-25
Water Cooler Holder Option.....9-26
Side Ladder Option.....9-27

SECTION 10 Service Tools
Tools.....10-1

MANUAL AND LITERATURE ORDER FORM REWARD

LEACH®

CAPSCREW MARKING AND TORQUE VALUES

Usage	Much Used	Used at Times	Used at Times
Capscrew Diameter & Minimum Tensile Strength PSI	To ¾ - 120,000 To 1 - 115,000	To ⅝ - 140,000 To ¾ - 133,000	150,000
Quality of Material	Min. Commercial	Med. Commercial	Best Commercial
SAE Grade Number	5	6 or 7	8
CAPSCREW HEAD MARKINGS Manufacturer's marks may vary. These are all SAE Grade 5 (3-line.)			
Capscrew Body Size (Inches) - (Thread)	**Torque Ft-Lb (kg m)**	**Torque Ft-Lb (kg m)**	**Torque Ft-Lb (kg m)**
¼ - 20	8 (1.11)	10 (1.38)	12 (1.66)
- 28	10 (1.38)		14 (1.94)
5/16 - 18	17 (2.35)	19 (2.63)	24 (3.32)
- 24	19 (2.63)		27 (3.73)
⅜ - 16	31 (4.29)	34 (4.70)	44 (6.09)
- 24	35 (4.84)		49 (6.78)
7/16 - 14	49 (6.78)	55 (7.61)	70 (9.68)
- 20	55 (7.61)		78 (10.79)
½ - 13	75 (10.37)	85 (11.76)	105 (14.52)
- 20	85 (11.76)		120 (16.60)
9/16 - 12	110 (15.21)	120 (16.60)	155 (21.44)
- 18	120 (16.60)		170 (23.51)
⅝ - 11	150 (20.75)	167 (23.10)	210 (29.04)
- 18	170 (23.51)		240 (33.19)
¾ - 10	270 (37.34)	280 (38.72)	375 (51.86)
- 16	295 (40.80)		420 (58.09)
⅞ - 9	395 (54.63)	440 (60.85)	605 (83.67)
- 14	435 (60.16)		675 (93.35)
1 - 8	590 (81.60)	660 (91.28)	910 (125.85)
- 14	660 (91.28)		990 (136.92)

NOTES:

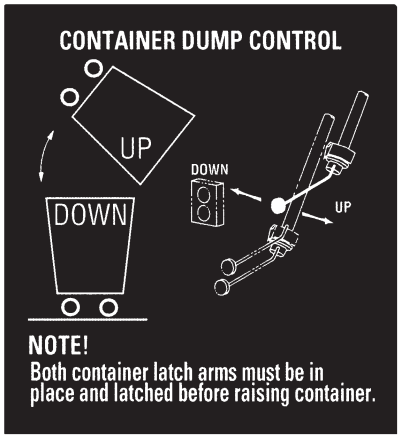
1. *Always use the torque values listed above when specific torque values are not available.*
2. *The above is based on use of clean, dry threads.*
3. *Reduce torque by 10% when engine oil is used as a lubricant.*
4. *Reduce torque by 20% if new plated capscrews are used.*
5. *General Formula for calculating Torques is as follows: Torque in Inch Lbs. = .2 x Nominal Diameter of Screw x Loads in Lbs., where Load = 80% of Yield Strength, expressed in Lbs., not pounds per square inch.*

DECALS

1*

PACKER
PACKER
PACKER

2



3*

ENGINE
SPEED-UP

4

HYDRAULIC
FLUID ONLY

5

FILTER ELEMENT CHANGE

To ensure oil cleanliness and longer machine life, change the element at intervals of 20hrs, 50hrs, and at 250hr intervals thereafter.

8

This unit conforms to all American National Standards Institute safety requirements Z 245.1 in effect on the date of manufacture.

LEACH

6

DRIVER SIGNAL

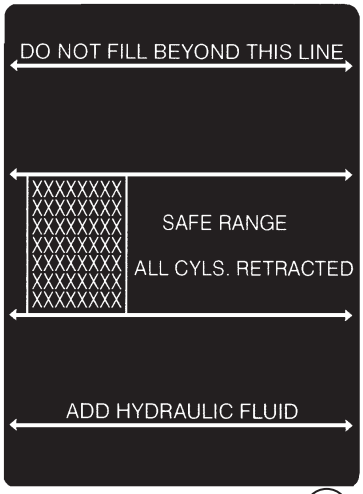
7

NO STEP

9*

BEACON LIGHT
ON OFF

10



15

HYD. PUSH BAR
HYD. PUSH BAR
HYD. PUSH BAR

11*

12*

14

CARRIER
CARRIER
CARRIER

13

EJECTION
EJECTION
EJECTION

16

PTO

19

12,000 LB. CAPACITY

17*

18*

8,000 LB. CAPACITY

* For placement and application of these decals refer to the Alpha/Beta/Delta Service Manual.

SECTION 1

DECALS

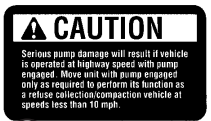
20

24

27

21

28



22

25*

29

30

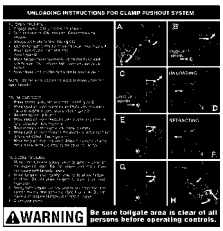
23

26*

31*

32

33



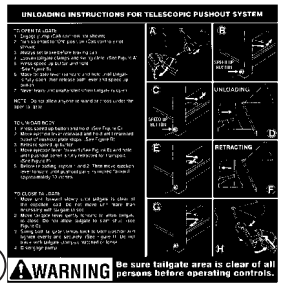
34

35

36

38

39

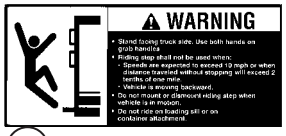


40

41*

42

46



43

44

45*

37

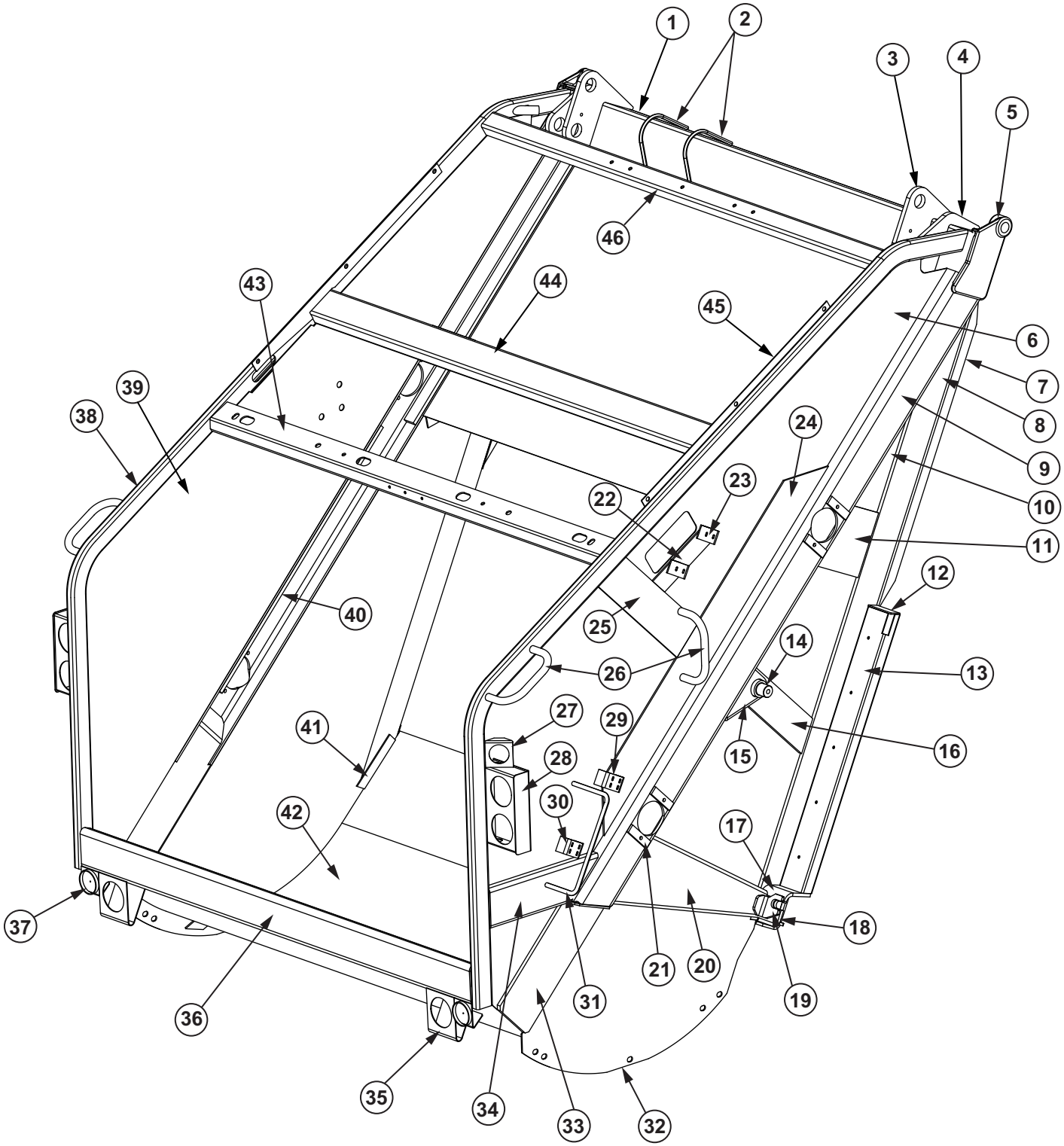
* For placement and application of these decals refer to the Container Handling Manual or Alpha/Beta/Delta Service Manual.

LEACH®

DECALS

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	209076	TIPPER, Left Hand	1
	209075	TIPPER, Right Hand	1
2	108139	PACKER	1
3	209974	OPERATING INSTRUCTIONS, Container Dump	1
4	100895	SPEED UP, Engine	1
5	40642	HYDRAULIC FLUID ONLY	1
6	104154	ANSI CONFORMITY	1
7	100894	DRIVER SIGNAL	1
8	100890	FILTER ELEMENT CHANGE	1
9	41637	NO STEP	1
10	100351	BEACON LIGHT	1
11	108073	HYDRAULIC PUSH BAR	1
12	106544	FLAG	1
13	108140	CARRIER	1
14	41894	WARNING, Chassis PTO	2
15	40643	FLUID LEVEL	1
16	108141	EJECTION	1
17	18674	12,000 lb. Capacity	1
18	18673	8,000 lb. Capacity	1
19	108144	PTO	1
20	210026	WARNING, Stand Up Operation	1
21	210021	WARNING, Access Door	1
22	101767	CAUTION, Pump Damage Highway Speed	1
23	35210	CAUTION, Pump Damage Run Dry	1
24	201580	CAUTION, Cylinder Spring	1
25	306327	WARNING, Latch Arms	2
26	306299	DANGER, Container	AR
27	38976	DANGER, Packer Panel	3
28	38979	DANGER, Stand Clear	4
29	306293	WARNING, Do Not Tow	1
30	36937	WARNING, Riding	1
31	35954	LINE PULL	1
32	102960	PTO On/Off	1
33	306298	WARNING, Truck Clearance	1
34	306169	UNLOADING Instructions (Clamp)	1
35	306020	OPERATING Instructions, Packing	1
36	109059-01	SOLENOID	1
37	105469	STROBE	1
38	108163	WARNING, Tailgate Open	1
39	108142	TAILGATE	1
40	306166	UNLOADING Instructions (Telescopic)	1
41	210025	WARNING, Container Transport	1
42	210027	WARNING, Operator or Service	1
43	36938	WARNING, Riding Step	2
44	32711	WARNING, Do Not Enter	2
45	108072	WINCH	1
46	100350	WORK, Light	1
	406147-04	KIT, Decals	1
	107486	2" Red/White Reflective Tape	Per Ft.
	108394	1 1/2" Red/White Reflective Tape	Per Ft.
	107681	2" White Reflective Tape	Per Ft.

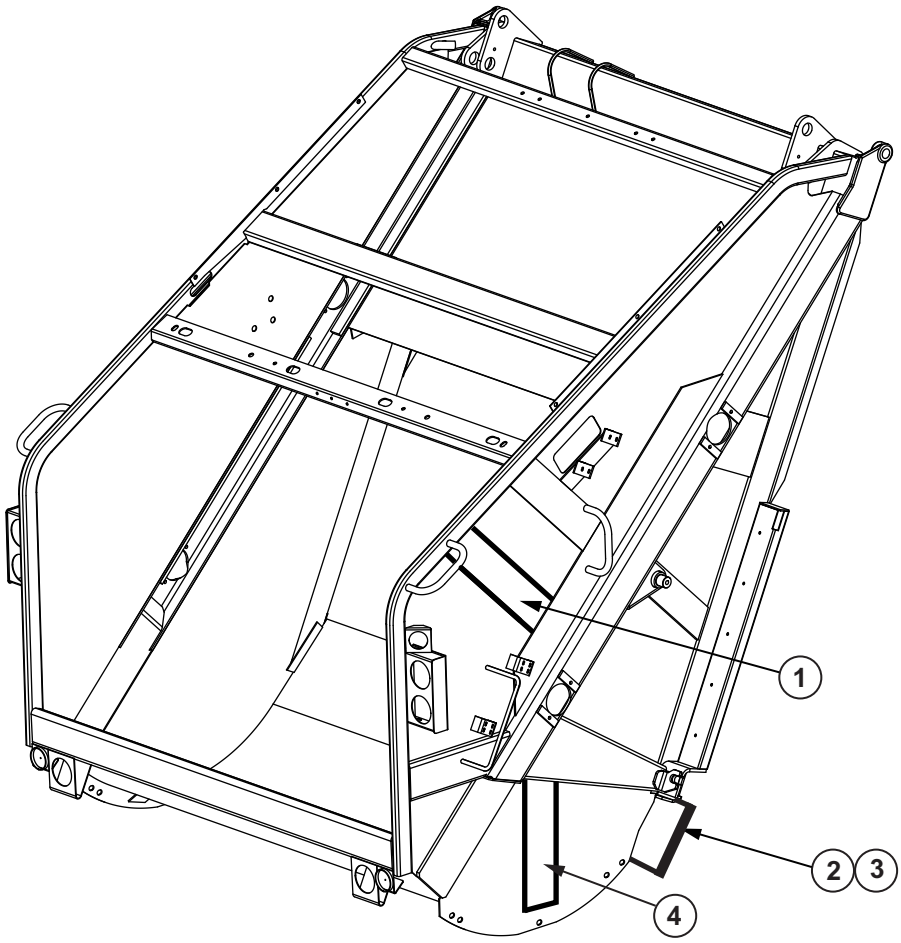
TAILGATE WELDMENT



TAILGATE WELDMENT

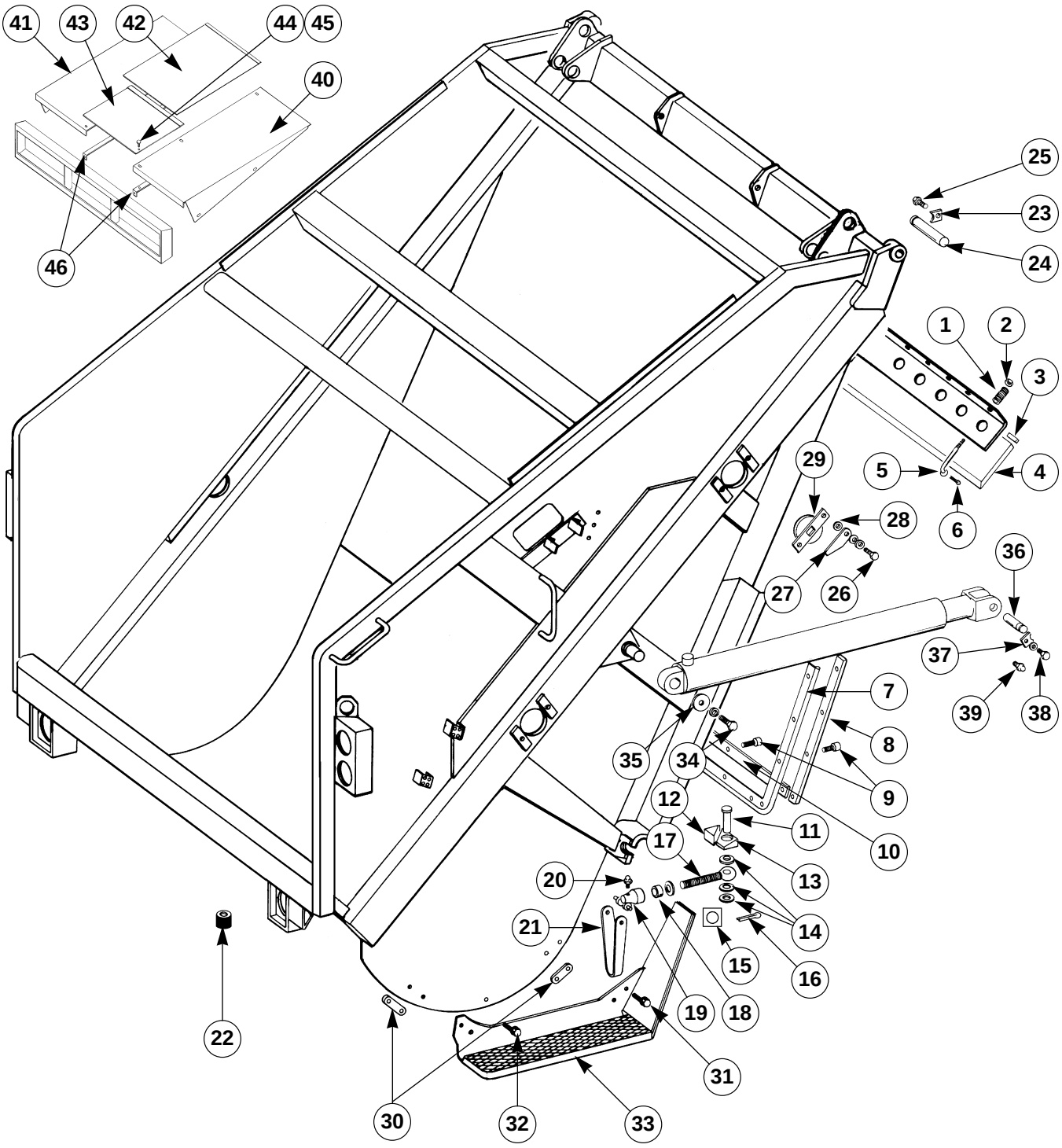
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	406649	WELDMENT, Hinge	1
2	210857	BAR, Light Guard	1
3	301911	EAR, Outside	2
4	300176	EAR, Inside	2
5	403848	HINGE, Tailgate, Right Hand	1
	403849	HINGE, Tailgate, Left Hand	1
6	407050	SHEET, Upper, Right Hand	1
7	200179	ANGLE, Closure	2
8	303752	BAR, Edge	2
9	407026	WELDMENT, Track Channel, Right Hand	1
	407025	WELDMENT, Track Channel, Left Hand	1
10	211258	PLATE, closure	2
11	307426	PLATE	2
12	200180	PLATE, Cover	2
13	303750	TUBE, Weldment, Seal Edge, Right Hand	1
	303751	TUBE, Weldment, Seal Edge, Left Hand	1
14	301372	PIN, Pivot	2
15	400124	BRACE, Pin Pivot, Right Hand	1
	400125	BRACE, Pin Pivot, Left Hand	1
16	300141	PLATE	2
17	15108	CLAMP ANGLE, Right Hand	1
	15109	CLAMP ANGLE, Left Hand	1
18	104619	BAR, Filler	2
19	205458	REINFORCEMENT, Latch, Right Hand	1
	205457	REINFORCEMENT, Latch, Left Hand	1
20	307378	BRACE, Lower, Right Hand	1
	307379	BRACE, Lower, Left Hand	1
21	104800	BAR, Tapped	8
22	210904	PLATE, Doubler, Controls	1
23	211100	BRACKET, Bearing Block, Upper	2
24	300508	REINFORCEMENT, Track Channel	2
25	301588	REINFORCEMENT, Tailgate Side	2
26	15251	GRAB HANDLE	4
27	306289	BRACKET, Combo Light	2
28	302245	WELDMENT, Light Bracket	2
29	211098	BRACKET, Bearing Block, Center	1
30	209784	BRACKET, Bearing Block	1
31	211259	GUARD, Tailgate Controls	1
32	407054	SHEET, Lower	2
33	307374	PLATE, Track Channel Stiffener, Right Side	1
	307375	PLATE, Track Channel Stiffener, Left Side	1
34	211210	BRACE, Track Channel Upper, Right Side	1
	211209	BRACE, Track Channel Upper, Left Side	1
35	302684	WELDMENT, Light Box	2
36	605339	EDGE, Loading	1
	605333	PLATE (not shown)	1
37	201649	WELDMENT, Reflector Bracket	2
38	406762	TUBING, Rear Edge, Right Hand	1
	406761	TUBING, Rear Edge, Left Hand	1
39	407049	SHEET, Upper, Left Hand	1
40	205934	BAR, Track Wear	4
41	204072	PLATE, Filler	2
42	403842	WELDMENT, Hopper, .19 thick	1
	405214	WELDMENT, hopper, .25 thick	1
	401676	LINER, Hopper Bottom (optional)	1
43	406804	WELDMENT, Support, Light Bar	1
44	210753	WELDMENT, Crossbeam	1
45	406905	GUIDE, Fastener, Top Sheets	2
46	406702	CHANNEL, Crossbeam, Upper	1

TAILGATE REINFORCEMENTS, BETA TAILGATES



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	211326	REINFORCEMENT, Tailgate Side	2
2	601377	GUSSET, Hopper Reinforcement	1
3	601372	CAP, Hopper Reinforcement (Not Shown)	2
4	211327	CHANNEL, Tailgate Side Reinforcement, Left Side	1
	211328	CHANNEL, Tailgate Side Reinforcement, Right Side	1
	601381	KIT, Hopper Reinforcement (Includes Items 2 & 3)	1
	307491	KIT, Tailgate Side Reinforcement (Includes Items 1 & 4)	1

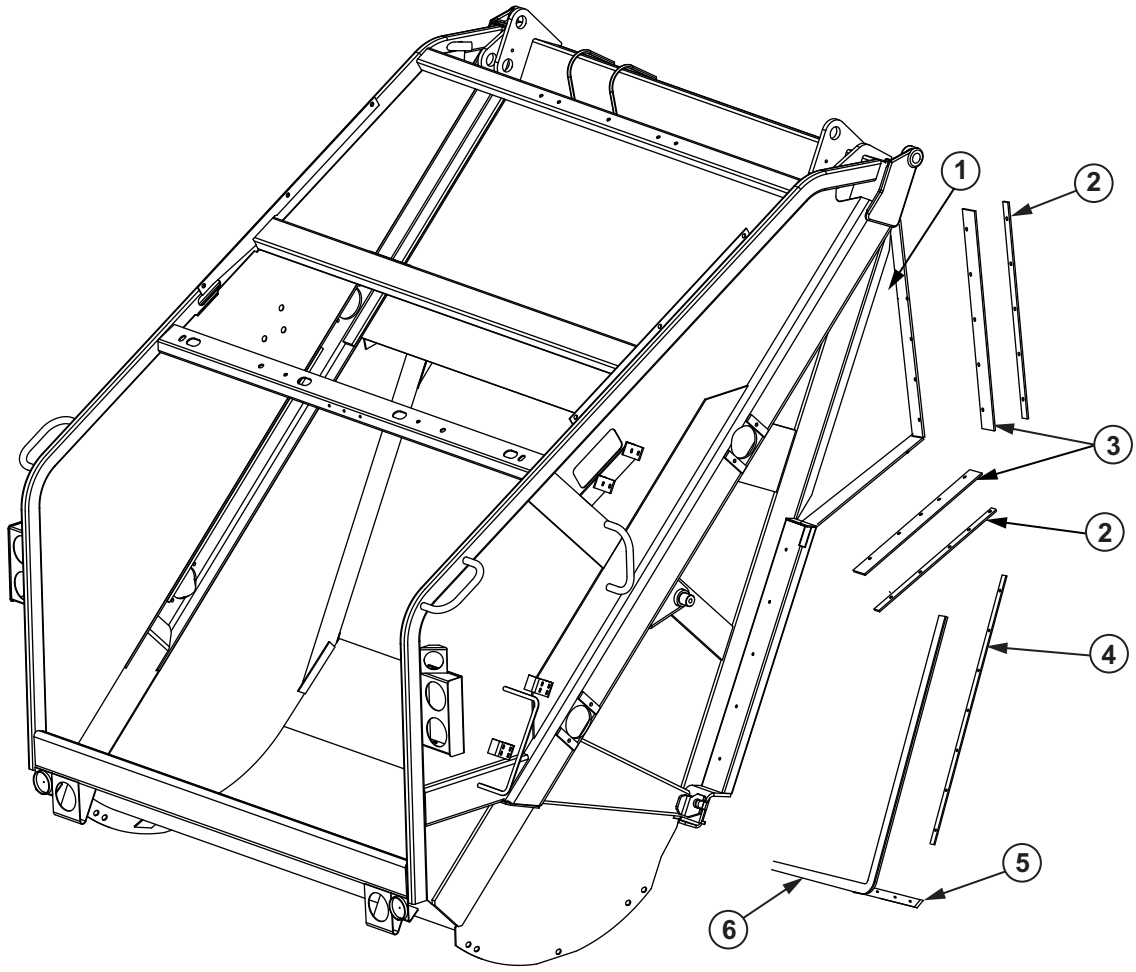
TAILGATE ASSEMBLY



TAILGATE ASSEMBLY

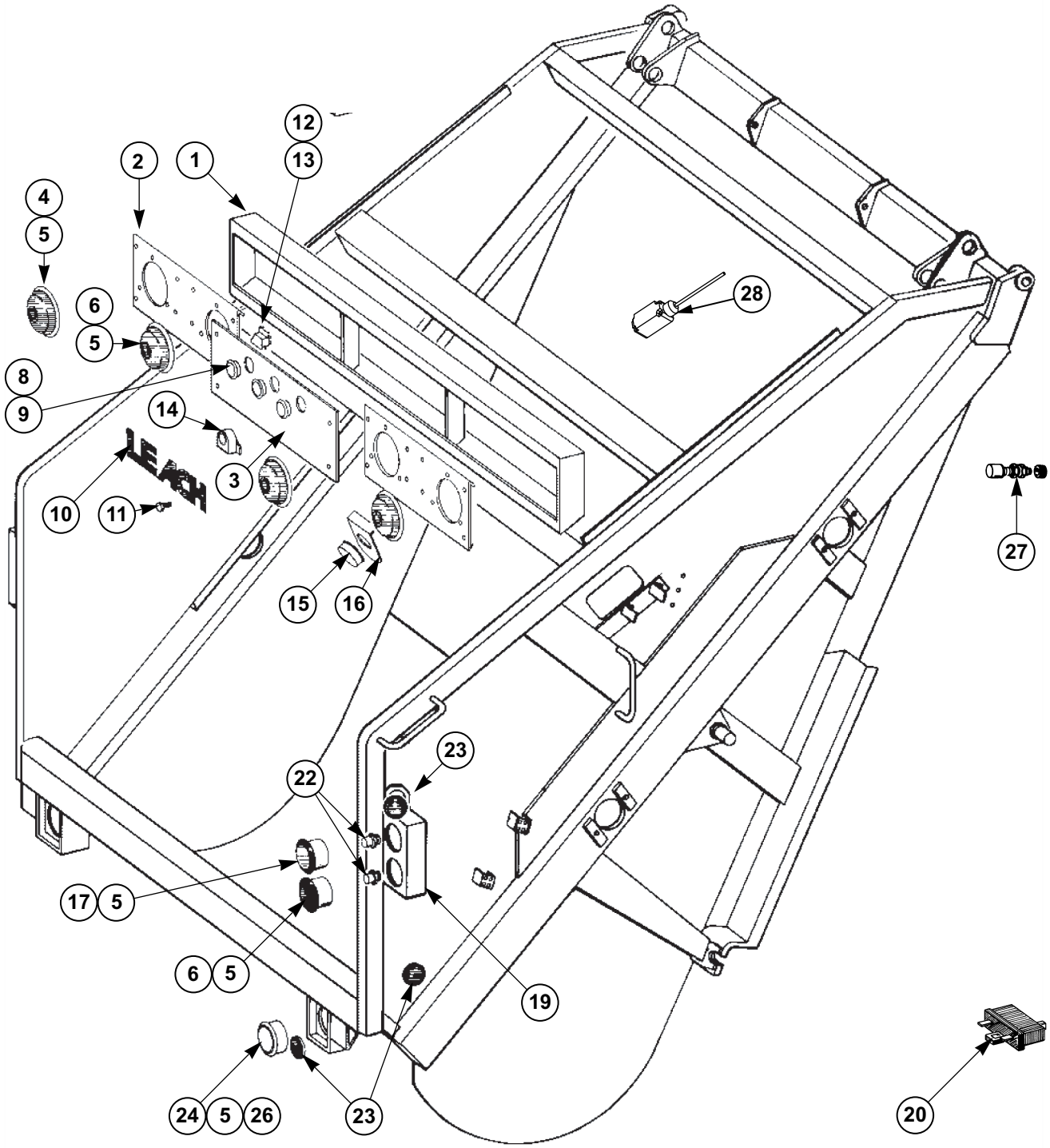
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	16211	SPRING	11
2	F3325	NUT, Stop,1/2" UNC	11
3	2R-1069	STOP, Wiper Sheet	6
4	400193	WIPER, Aluminum	1
	403230	WIPER, Steel	1
	103270	WIPER Assembly, Aluminum, Includes Items 1-2, 4-6	1
	103270-S	WIPER Assembly, Steel, Includes Items 1-2, 4-6	1
	605193	WIPER Assembly, Heavy Duty Weld In	1
5	2R-1123	BOLT	11
6	F6775	PIN, Cotter, 3/16" X 1"	11
7	601676	SEAL, Tailgate, Replaces 102850	1
8	301355	BAR, Seal Side	2
9	F5675	SCREW, Cap, 3/8" X 1" UNC	21
10	301356	BAR, Seal	1
11	PO-1501	PIN	2
12	PO-1504	GUIDE, Tailgate	2
13	301470	GUIDE, Body, R.h.	1
	301469	GUIDE, Body, L.h.	1
14	PO-687	WASHER, Flat, Heavy, 1"	8
15	PO-159	PIVOT, Clamp Bar	2
16	F6850	PIN, Cotter, 1/4" X 1 1/2"	2
17	PO-247	BOLT, Tailgate Clamp	2
18	16162	BEARING	2
19	PO-2300	HUB, Clamp	2
20	16171	FITTING, Grease	2
21	PO-2303	HANDLE, Clamp	2
	PO-2299	CLAMP Assembly, Tailgate, Includes Items 18-21	2
22	@0105	PLUG, Pipe, Square Head, 11/4" NPT	1
23	PO-410	RETAINER	2
24	200572	PIN	2
25	F1325	SCREW, Cap, 5/8 X 1 1/4" UNC	2
	F8050	WASHER, Lock, 5/8"	2
26	F0945	SCREW, Cap, Nylock, 1/2" X 1 1/4" UNC	4
	F7350	WASHER, Flat, 1/2"	4
27	200312	COVER, Right	2
	200313	COVER, Left	2
28	35784	SPACER	4
29	204138	COVER, Track Hole	4
30	210854	PLATE, Backing, Threaded	2
31	F1380	BOLT, 5/8 - 11 X 1 3/4" UNC	2
32	F1380	BOLT, 5/8 - 11 X 1 3/4" UNC	2
33	700722	WELDMENT, Step, Right Hand	1
	700721	WELDMENT, Step, Left Hand	1
34	F1300	SCREW, Cap, 5/8" X 1" UNC	1
35	31937	RETAINER	1
36	PO-420	PIN, Rod	1
37	PO-421	RETAINER, Pin	1
38	F0258	SCREW, Cap, 3/8" X 3/4" UNC	1
39	16170	FITTING, Grease	1
40	406659	TOP SHEET, Right Hand	1
41	406660	TOP SHEET, Left Hand	1
42	307025	TOP SHEET, Center, Full	1
43	307024	TOP SHEET, Center, Short	1
44	107860	NUT, Speed, Foldover	12
45	F8300	SCREW, Lock, Flange	12
46	210723	WELDMENT, Support, Top Sheet	2

TAILGATE SEAL, FULL EXTENDED (OPTIONAL)



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	603548	WELDMENT, Extended Seal Plate	2
2	603544	BAR, Extended	4
3	603545	RUBBER STRIP, Extended Seal	4
	F5850	CAPSCREW, Socket Head, 3/8" X 1 1/2" UNC	20
	F7875	WASHER, Lock, 3/8"	20
	F2975	NUT, 3/8" UNC	20
4	306887	BAR, Side, Extended	2
5	400102	BAR, Cross	1
6	601554	SEAL, Tailgate	16 FT
	F5800	CAPSCREW, Socket Head, 3/8" X 1 1/4" UNC	12
	F7875	WASHER, Lock, 3/8"	12
	F2975	NUT, 3/8" UNC	12
	F5675	CAPSCREW, Socket Head, 3/8" X 1" UNC	11
	900076	KIT, Extended Seal (Includes Items 1 - 6)	1

TAILGATE ELECTRICAL

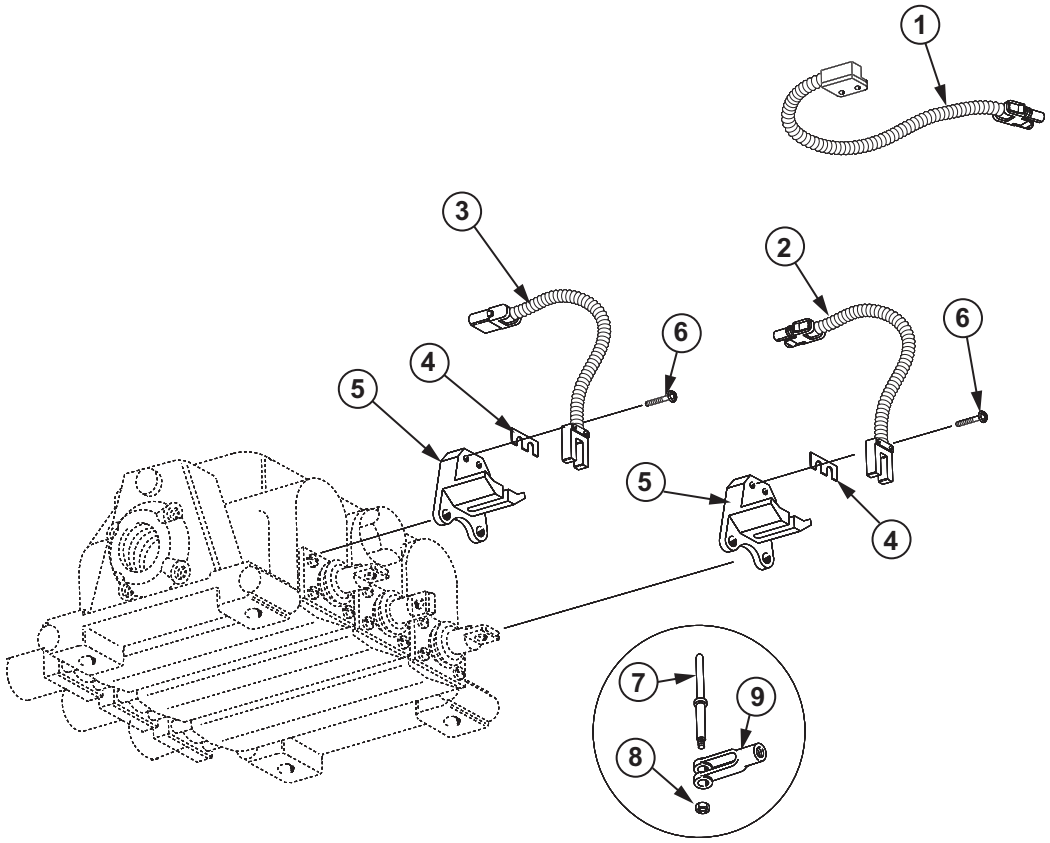


TAILGATE ELECTRICAL

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	405834	CHANNEL, Light Box	1
2	405857	PANEL, Rear Light	2
3	307090	WELDMENT, Light Panel and Box	1
4	107663	LAMP, Yellow, 4”	2
	107665	LAMP, Yellow, 7”	2
	109165	LAMP, Yellow, 4” LED	2
5	40620	GROMMET, 4”	10
	F4208	MACHINE SCREW, 10-32 X 1” (use w/ 7” lights)	AR
	F2675	NUT, 10-32 (use with 7” lights)	AR
6	107791	LAMP, Red, 4”	4
	107664	LAMP, Red, 7”	2
	109164	LAMP, Red, 4” LED	4
7	F4208	MACHINE SCREW, 10-32 X 1” (use w/ 7” lights)	AR
	F2675	NUT, 10-32 (use with 7” lights)	AR
8	40624	LAMP, Marker, Red	3
	109166	LAMP, Marker, Red, LED	3
9	104977	GROMMET, Marker	3
10	209971-01	PLATE, Leach Logo (white)	1
	209971-02	PLATE, Leach Logo (blue)	1
	209971-03	PLATE, Leach Logo (chrome)	1
11	F8305	SCREW, Lock, Flange	AR
	107860	NUT, Speed, Clip (not shown)	AR
12	107687	LAMP, License Plate	1
13	406808	BRACKET, License Plate	1
14	107550	ALARM, Back Up	1
15	105433	LAMP, Utility	2
16	307149	BRACKET, Utility lamp	2
17	107663	LAMP, Yellow, 4”	2
	109165	LAMP, Yellow, 4” LED	2
18	107539	PLUG, Lamp Connection	AR
	109170	PLUG, Lamp Connection, for LED Lights	AR
19	33179	PUSH BUTTON, Driver Signal	2
20	SK-2093	BUZZER, Driver Signal (In Cab)	1
	604893	BUZZER, Driver Signal (In Cab) Dual Rate	1
21	107790	LAMP, Back Up	2
22	107539	PLUG, Lamp Connection	2
23	16136	REFLECTOR	4
24	40624	LAMP, Marker, Red	2
25	107534	GROMMET, 2.5 “	2
26	2738-0031A	PLUG, Lamp Connection	2
27	37747	SWITCH, Tailgate Ajar (Before Alpha/Beta s/n 4160 Delta Before s/n 5056) (**NOTE:** For Alpha/Beta After s/n 4159, Delta After s/n 5055 See Page 1-14)	1
28	100327	SWITCH, Speed Up (Before Alpha/Beta s/n 4160 Delta Before s/n 5056) (**NOTE:** For Alpha/Beta After s/n 4159, Delta After s/n 5055 See Page 1-14)	1
	405869	HARNESS, Tailgate and Light Bar (not shown)	1
	1972-0102A	WIRE, White, # 14 Gauge (not shown)	Per Ft
	1972-0126A	WIRE, Brown, # 14 Gauge (not shown)	Per Ft
	1971-0115A	WIRE, Blue/White Stripe # 14 Gauge (not shown)	Per Ft

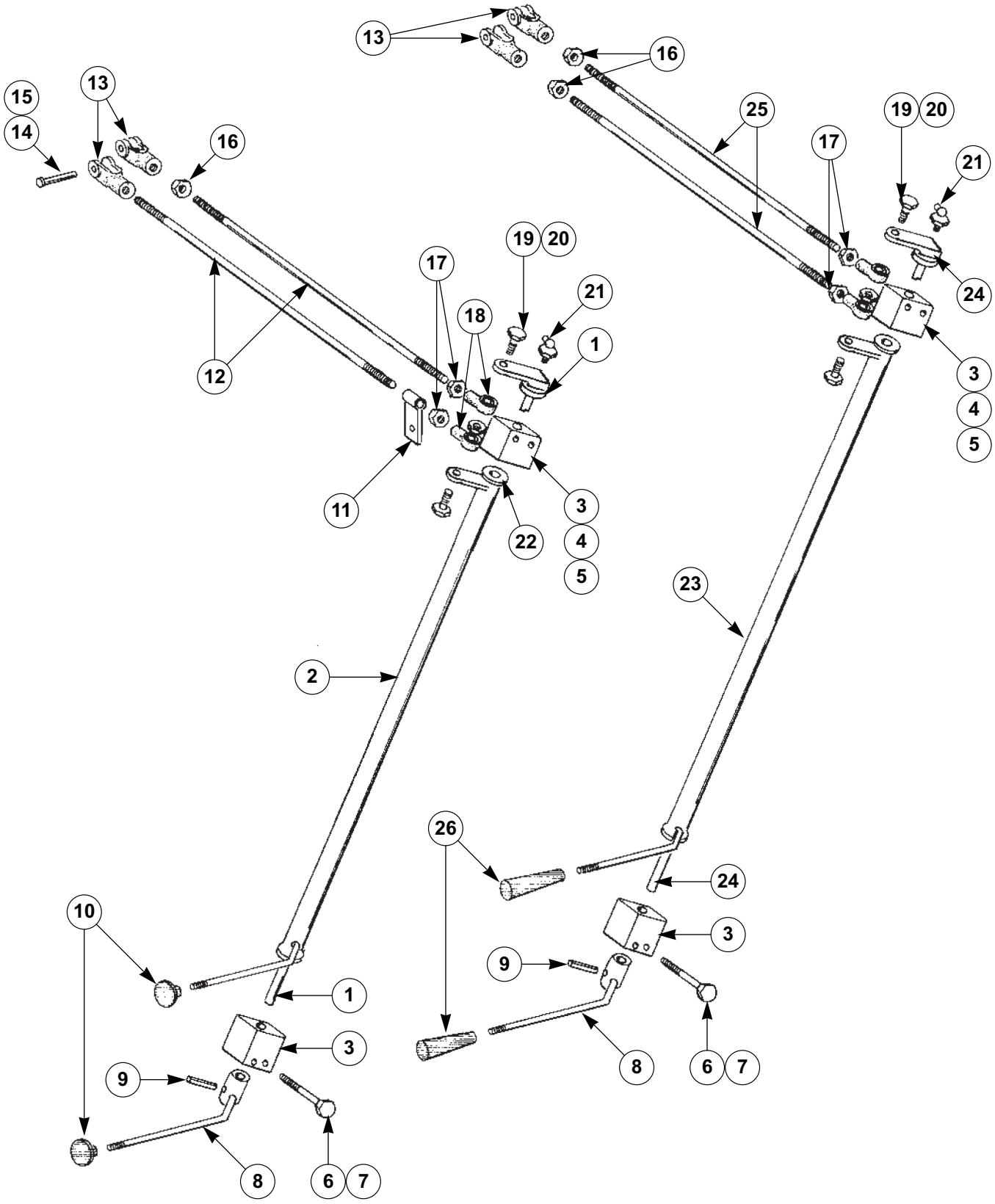
SPEED UP, AJAR, SPEED LIMIT SWITCHES, ALPHA

BETA AFTER S/N 4159, DELTA AFTER S/N 5055



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	605675	SWITCH, Proximity, Tailgate Ajar	1
2	605629	SWITCH, Proximity, Speed Limit	1
3	605630	SWITCH, Proximity, Speed Up	1
4	601996	SHIM	AR
5	602951	BRACKET, Switch	1
6	F8219	SCREW, # 8 X 1"	2
7	602592	PIN, extended clevis, speed up cut out	1
	700332	PIN, extended clevis, speed up	1
8	F2815	NUT, Lock, 1/4" UNC	1
9	104696	ROD END	1
	604128	SWITCH, optional packer speed up proximity (not shown)	

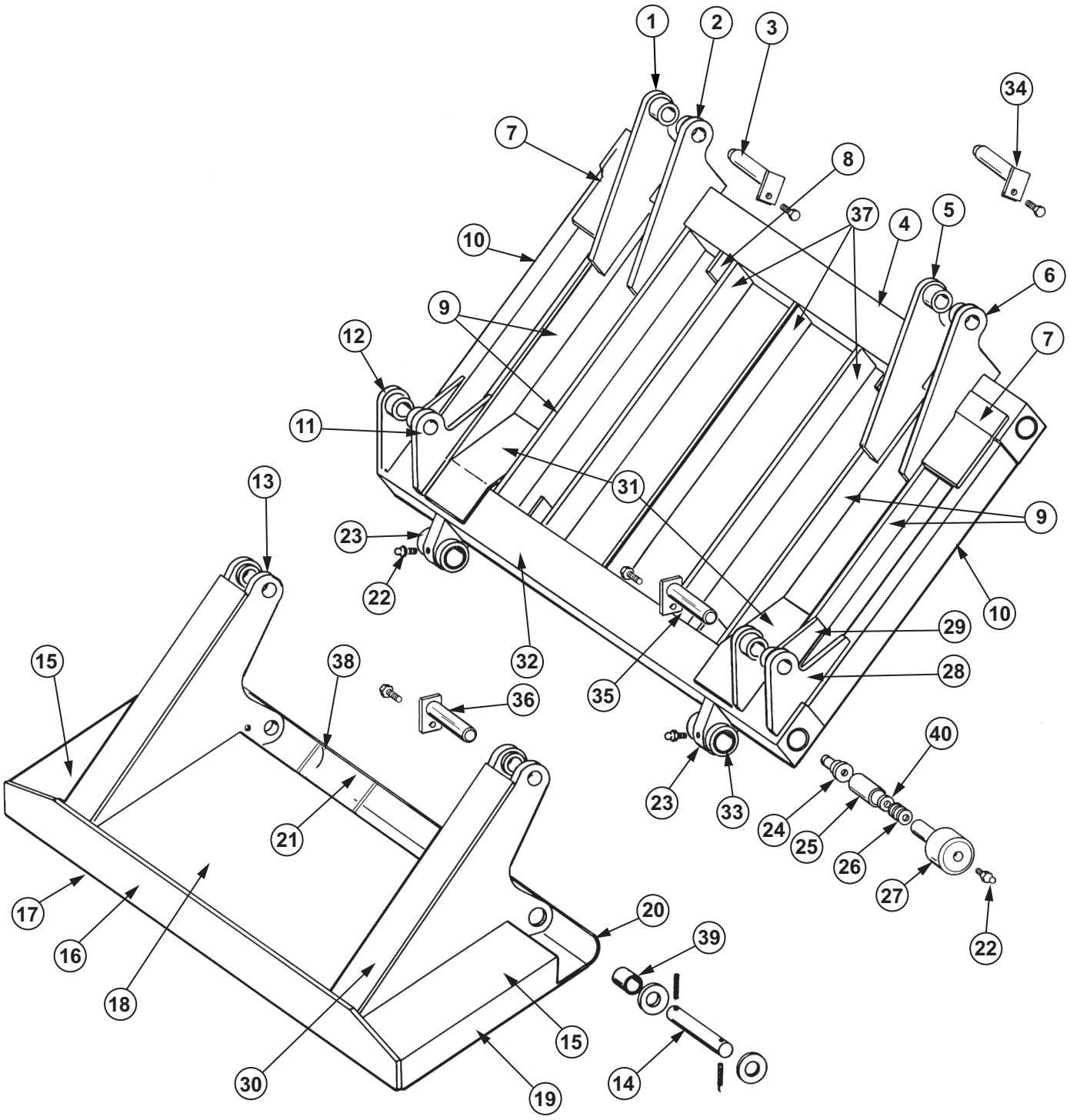
REAR CONTROLS



REAR CONTROLS

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	210825	WELDMENT, Rod, Control Lever	1
2	307079	WELDMENT, Tube, Control Lever	1
3	41162	BLOCK, Bearing	4
4	41159	BUSHING, Large	4
5	41160	BUSHING, Small	2
6	F0061	SCREW, Cap, 1/4” X 2 3/4” UNC	8
7	F2775	NUT, Nylock, 1/4” UNC	8
8	306223	WELDMENT, Control Lever	2
9	601820	ROLL PIN, 5/16” X 1 3/4”	2
10	108229	KNOB, Control lever	2
11	107818	TRIGGER, Speed Up Switch	
		Alpha/Beta before s/n 4159, Delta before s/n 5055	1
12	211053	ROD, Control, Packer/Carrier	2
13	104696	CLEVIS, Rod End	2
14	107616	PIN, Clevis, 5/16” X 1 1/8”	2
15	F6675	PIN, Cotter, 3/32” X 1/2”	2
16	F3212	NUT, Jam, 7/16” UNC	2
17	F3410	NUT, Jam, 1/2” UNC	4
18	102291	ROD END	2
	106937-05	CLEVIS CLIP, For Third and Forth Section	2
19	F0979	SCREW, Cap, 1/2” X 1 1/2” UNC	2
20	F3300	NUT, Nylock, 1/2” UNC	2
21	16172	FITTING, Grease	2
22	F7475	WASHER, Flat, 3/4”	1
23	210823	WELDMENT, Tube, Control Lever	1
24	210821	WELDMENT, Rod, Control Lever (4th Section Only)	1
25	211053	ROD, Control (Options)	2
26	108287	KNOB, Control	2

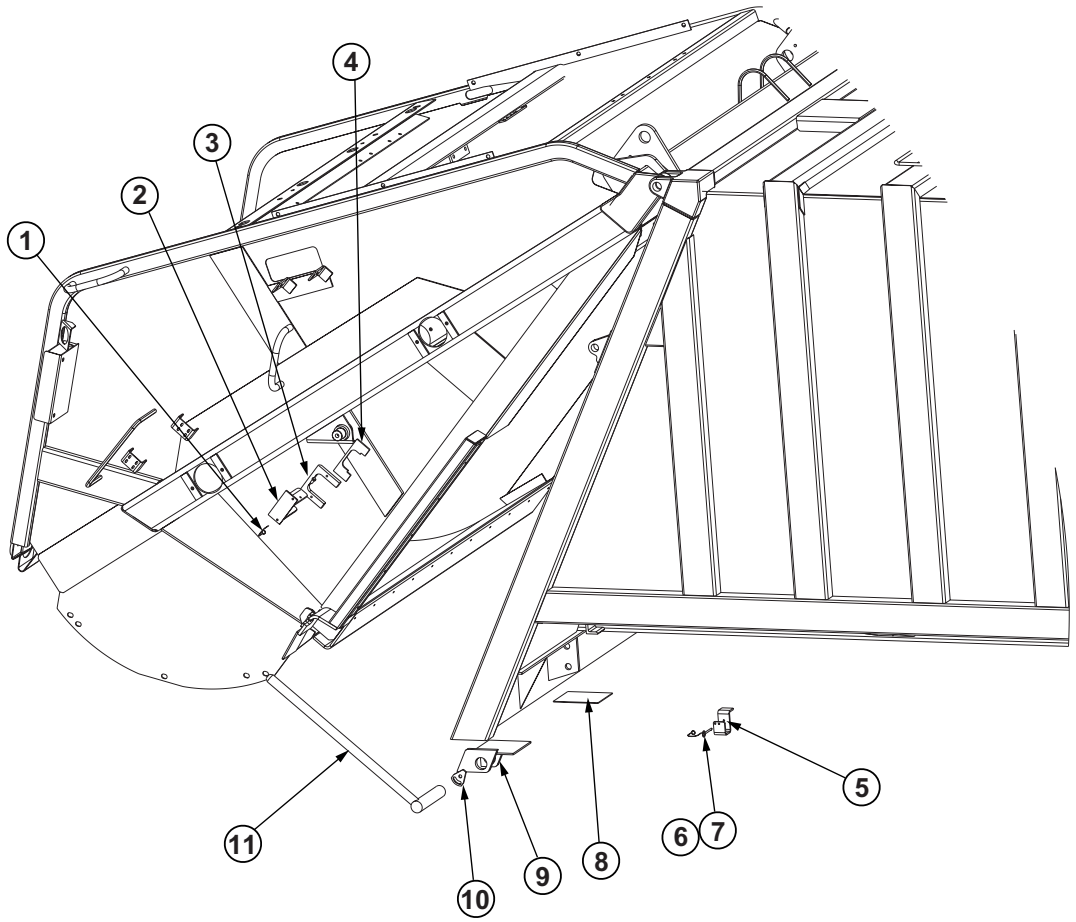
CARRIER AND PACKER PANEL



CARRIER AND PACKER PANEL

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	402077	WELDMENT, Cylinder Mount, Left Hand	1
2	402075	WELDMENT, Cylinder Mount, Left Hand, Tapped	1
3	202896	PIN, Packer Cylinder, Case End	2
	204469	SPACER	2
	F0945	SCREW, Cap, 1/2" X 1 1/4" UNC	2
4	300538	WELDMENT, Front Tube	1
5	402074	WELDMENT, Cylinder Mount, Right Hand, Tapped	1
6	402076	WELDMENT, Cylinder Mount, Right Hand	1
7	301900	PLATE, Corner Reinforcement	2
8	200124	BAR, Lifting	2
9	202891	BAR, Cylinder Ears	4
10	200060	TUBE, Intermediate	2
11	301903	WELDMENT, Inside Carrier Cylinder, Left Hand, Tapped	1
12	300077	WELDMENT, Carrier Cylinder, Left Hand	1
13	204957	TOWER, Packer Plate	1
14	204966	PIN, Carrier to Packer	2
	103834	WASHER	4
	103836	PIN, Roll, 3/8" X 4"	4
15	204958	PLATE, Side, Top	2
16	300129	EDGE, Packer Plate	1
17	200166	SHEET, Bottom	1
18	303256	SHEET, Top Center	1
19	200165	EDGE, Side	2
20	303257	SHIELD, Packer, End	2
21	303258	SHIELD, Packer, Center	1
22	16170	FITTING, Grease	6
23	303187	WELDMENT, Packer, Carrier, Hinge	2
24	201114	PLUG	4
25	2R-1796	BUSHING	4
26	SK-1817	WASHER	As Req.
27	301899	ROLLER	4
28	300076	WELDMENT, Carrier Cylinder, Right Hand	1
29	301902	WELDMENT, Inside Carrier Cylinder, Right Hand, Tapped	1
30	203244	PLATE, Tower, Packer Plate	2
31	203252	PLATE, Reinforcing, Hinge Tube	2
32	300538	WELDMENT, Tube	1
33	101700	BUSHING, Hinge	4
34	202904	PIN, Carrier Cylinder, Case End	2
	204469	SPACER	2
	F0945	SCREW, Cap, 1/2" X 1 1/4" UNC	2
35	202894	PIN, Carrier Cylinder, Rod End	2
	204469	SPACER	2
	F0945	SCREW, Cap, 1/2" X 1 1/4" UNC	2
36	202902	PIN, Packer Cylinder, Rod End	2
	204469	SPACER	2
	F0945	SCREW, Cap, 1/2" X 1 1/4" UNC	2
37	202420	CHANNEL, Intermediate	3
38	204961	SUPPOR , Shield	4
39	101700	BUSHING, Insert, Carrier To Packer Pin	4
40	2R-1799	SPACER	4
	403303	CARRIER PLATE ASSEMBLY,Includes Items 22, 24-25, 33	1
	406892-03	PACKER PLATE WELDMENT	1
	403640	**BETA**, Carrier Plate Assembly	
	406892-04	**BETA**, Packer Plate Assembly	

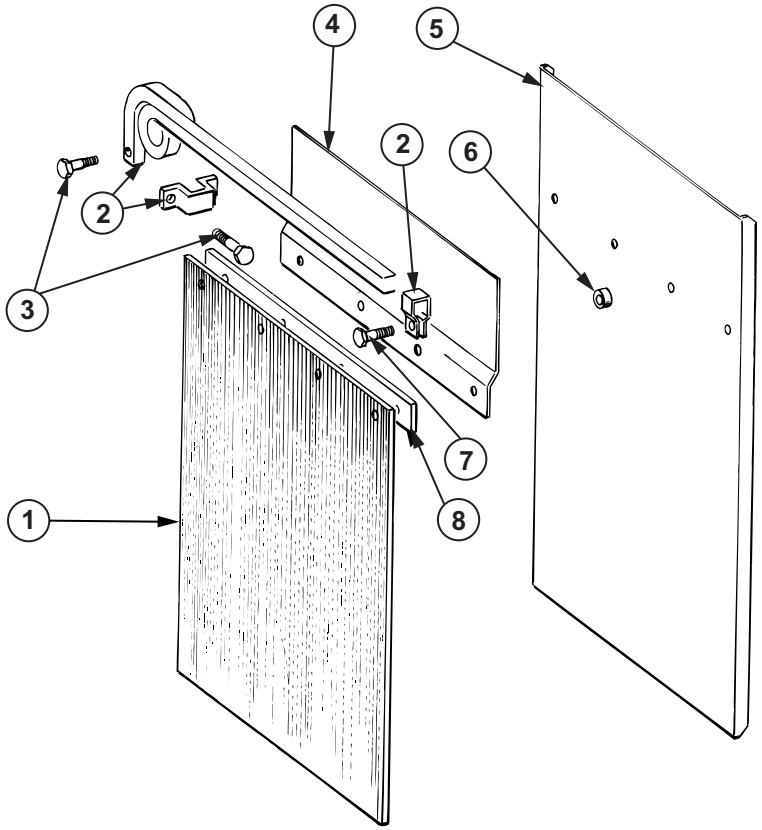
TAILGATE PROPS



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	700367	CHAIN, 6”	2
2	700742	WELDMENT , Prop Rest	2
3	700743	BLOCK, Support, Prop Rest (Outside)	2
4	700744	BLOCK, Support, Prop Rest (Inside)	2
5	700760	BRACKET , Support, Prop	2
6	700367	CHAIN, 6”	2
7	700366	PIN, Quick Release	2
8	700735	SPACER, Floor	2
9	700741	WELDMENT , Pivot Block, RH	1
	700761	WELDMENT , Pivot Block, LH	1
10	700750	STOP, Prop	2
	F0910	SCREW , Cap, 1/2” X 1” UNC	4
	F7360	WASHER, Flat, 1/2”	4
	F7975	WASHER, Lock, 1/2”	4
11	700739	WELDMENT , Prop Rod	2
	900211	KIT, Tailgate Prop (Includes Items 1-11)	1

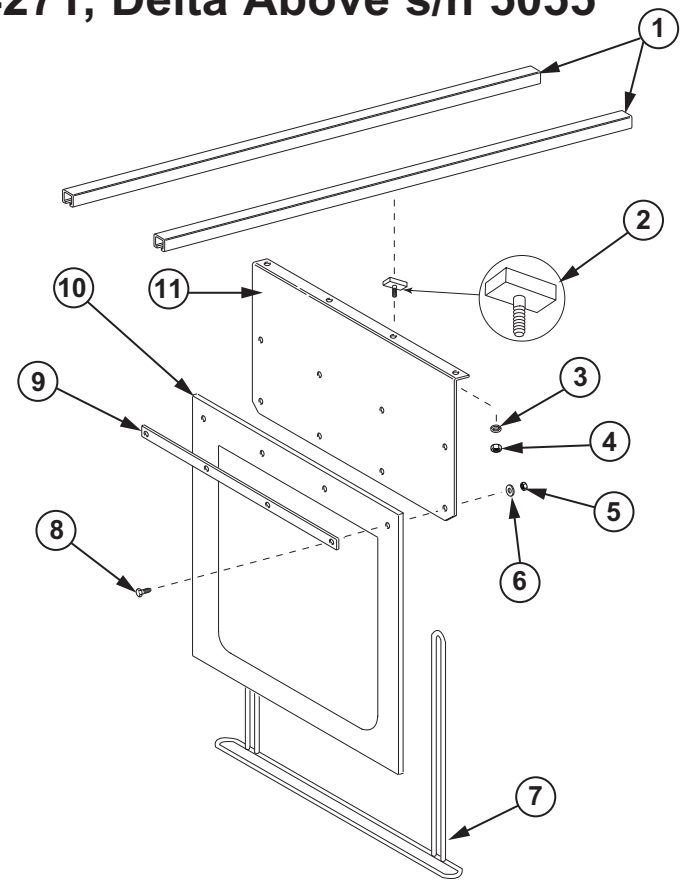
MUD GUARD ASSEMBLY, ALPHA/BETA Below

s/n 4272, DELTA Below s/n 5056



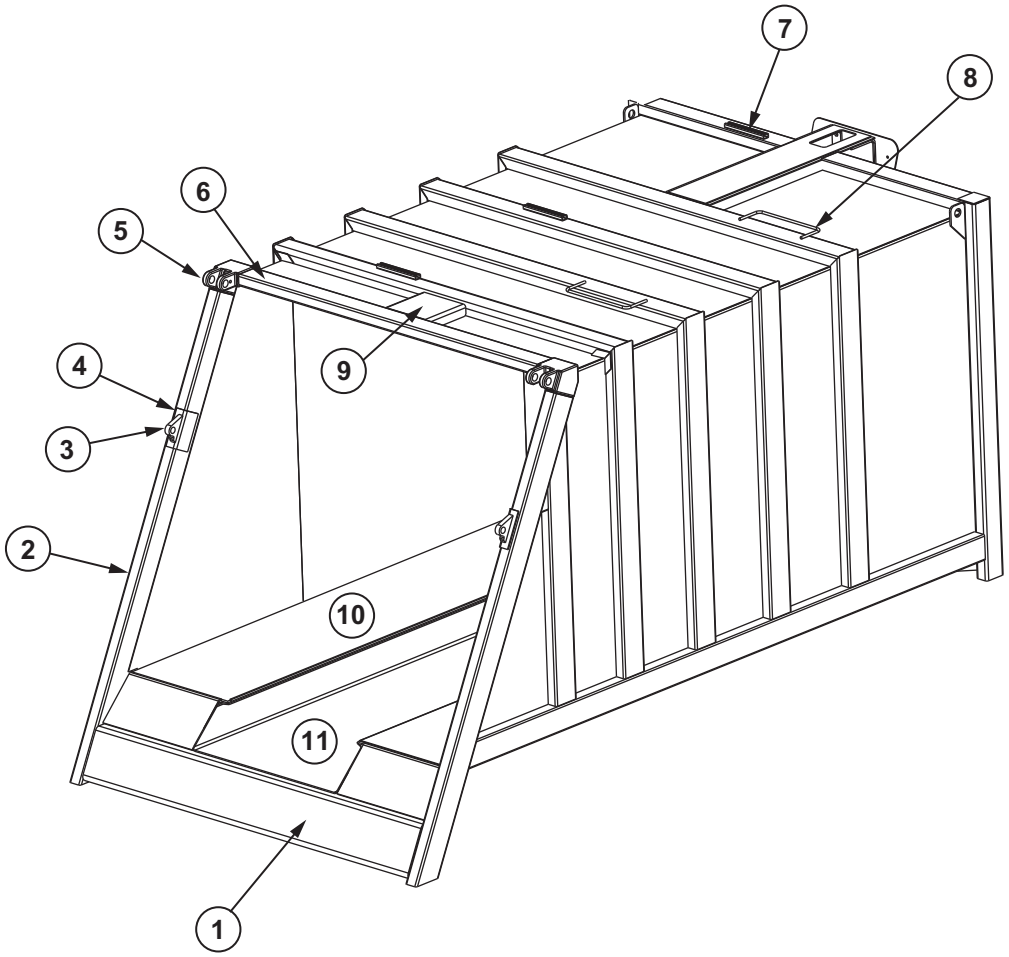
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	209639	FLAP, Mud – Rubber (26" Long)	2
2	209116	KIT, Mud Flap Bracket	2
3	F0024	SCREW, Cap, 1/4" x 1" UNC	3
	F2775	NUT, Stop, 1/4" UNC	3
4	305898	PLATE, Mud Flap Upper (10 " High)	2
	305899	PLATE, Mud Flap Upper (13 3/4" High)	2
5	210248	FLAP, Mud – Metal (26" Long)	2
6	107619	SPACER	16
7	F0400	SCREW, Cap, 3/8" X 1 3/4" UNC	8
	F7250	WASHER, Flat, 3/8"	8
	F3075	NUT	
8	205381	STRAP	2

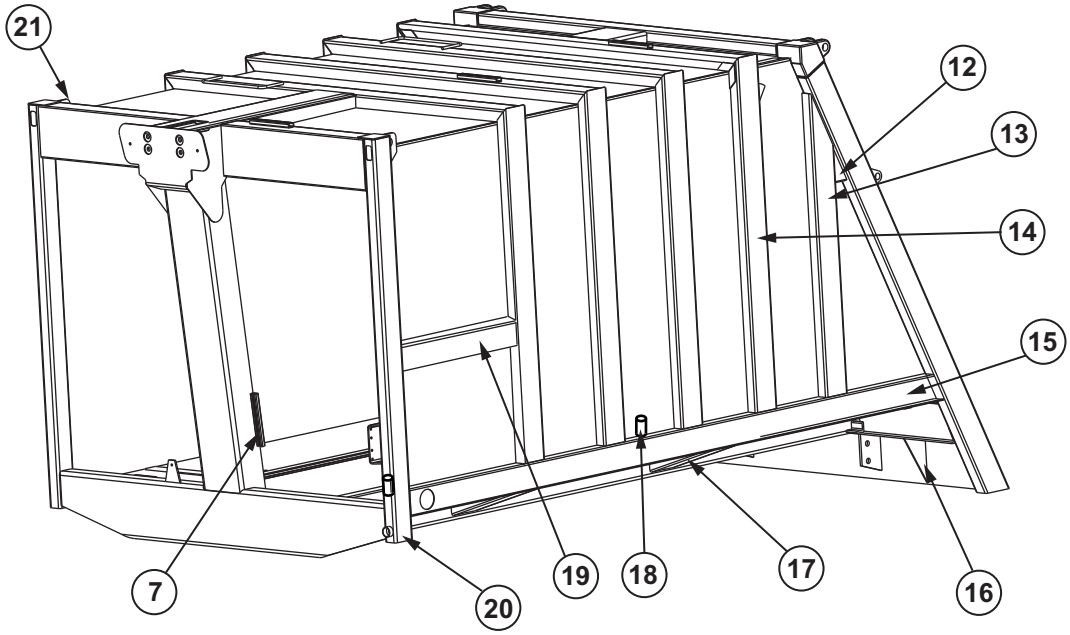
MUD GUARD ASSEMBLY, ALPHA/BETA Above s/n 4271, Delta Above s/n 5055



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	604843	RAIL, Strut, 41"	2
	604842	RAIL, Strut, 23 1/2"	2
	604841	RAIL, Strut, 20"	2
	604840	RAIL, Strut, 17"	2
	604839	RAIL, Strut, 12"	2
2	605702	T-BOLT	2
3	F7325	WASHER, Flat	2
4	F3190	LOCKNUT	2
5	F2975	NUT, Hex, 3/8" UNC	4
6	F7250	WASHER, Flat, 3/8"	4
7	602709	BRACKET, Anti-sail	1
8	F0375	CAPSCREW, Hex Head,3/8" X 1 1/2" UNC	4
9	P-16-419	STRAP, Reinforcement	1
10	209639	FLAP, Rubber, Black With LEACH Logo	2
	210154	FLAP, Rubber, Black, Plain	2
	209643	GUARD, Steel	2
11	604867	BRACKET, Mounting, Mud Flap	1

BODY WELDMENT - 20 YARD

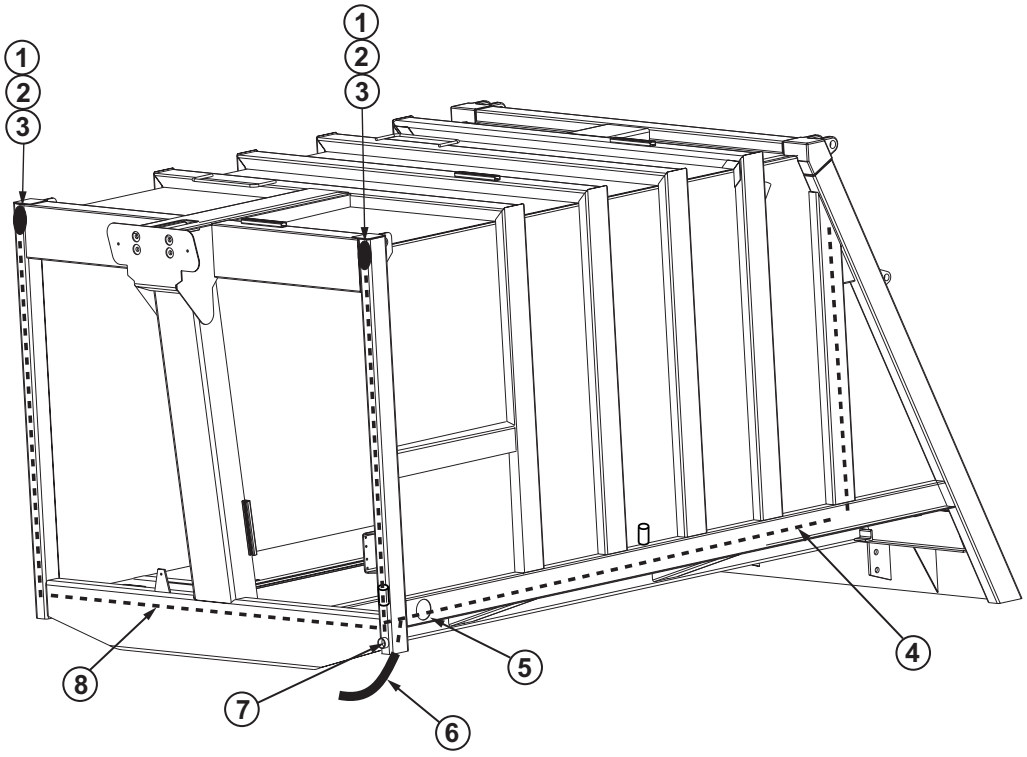




BODY WELDMENT - 20 YARD

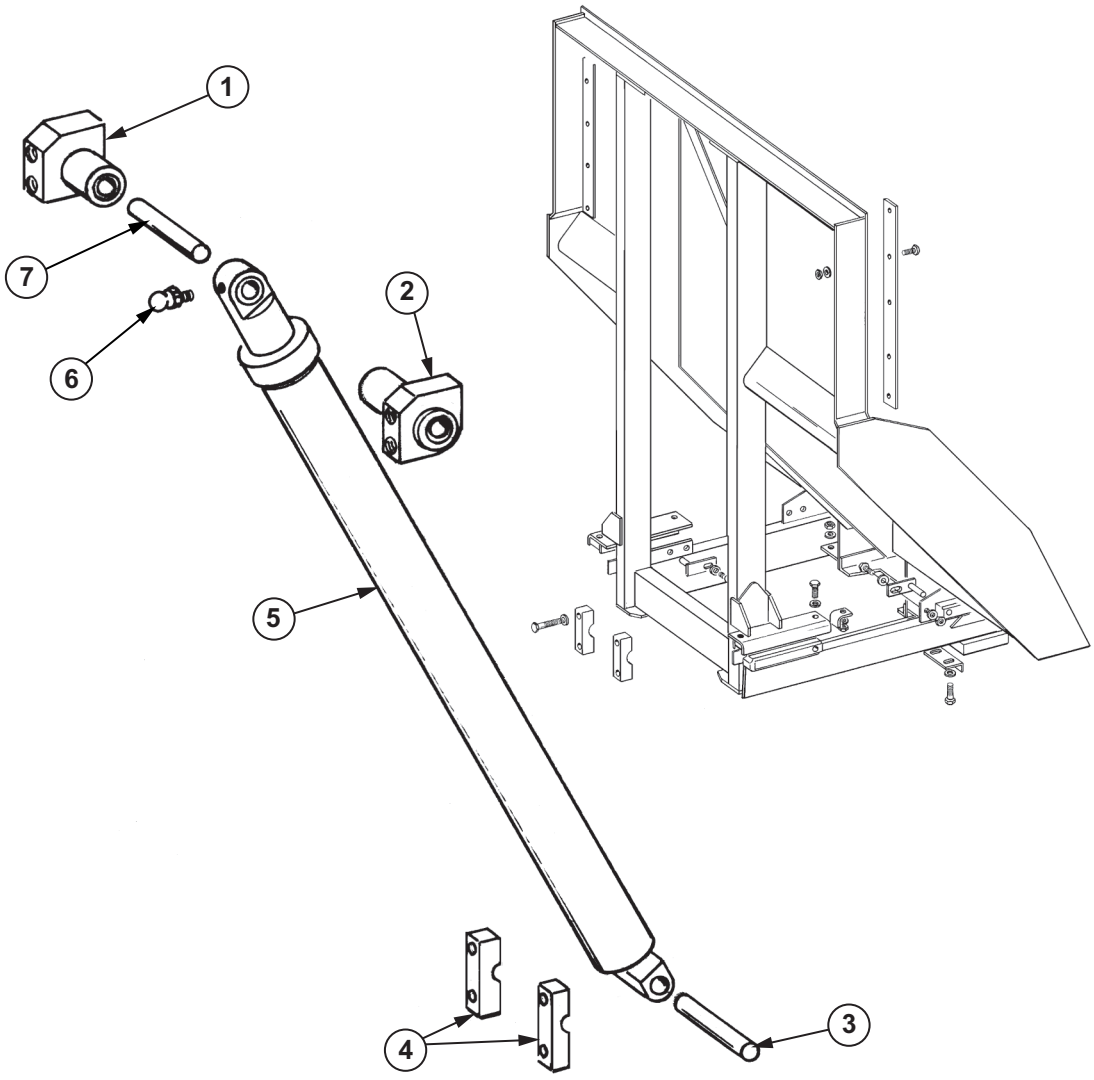
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	400014	APRON	1
2	300011	BRACE, Vertical, Rear	2
3	PO-156	PIVOT, Lift	2
4	204143	PLATE, Reinforcement	2
5	400018	CASTING, Hinge, Right Hand	1
	400019	CASTING, Hinge, Left Hand	1
6	300009	BRACE, Horizontal, Rear	1
7	209751	RAIL, Tube Support	4
8	208623	BAR, For Safety Tethers	2
9	211131	PLATE. Roof Stiffener	1
10	403266	SHEET, Floor	2
11	406980	TROUGH	
12	301554	GUSSET, Rear Frame Tube, RH	1
	301555	GUSSET, Rear Frame Tube, LH	1
13	400032	BRACE, Vertical Rear, RH	1
	400033	BRACE, Vertical Rear, LH	1
14	602259	BRACE, Vertical, Side	8
15	406768	CHANNEL, Lower Body, RH, Alpha, Beta	1
	406610	CHANNEL, Lower Body, RH, Delta	1
	406767	CHANNEL, Lower Body, LH, Alpha, Beta	1
	406609	CHANNEL, Lower Body, LH, Delta	1
16	300013	GUSSET	2
17	400298	BRACE, Floor	4
18	17786	SOCKET, Pin	2
19	301306	BRACE, Horizontal, Side	1
20	307020	BRACE, Vertical, Front, RH	1
	306996	BRACE, Vertical, Front, LH	1
21	200398	PLATE, Lift	2
		NOT SHOWN	1
	601617	WELDMENT, Side Door (Includes Hinge)	1
	201018	TUBE, Bolt (For Door Latch)	1
	201019	SPACER (For Door Latch)	1
	17787	PIN, Chain	
	205939	CHAIN, Ten Links	
	39608	BARREL BOLT	1
	39609	BARREL BOLT HANDLE	1

BODY ELECTRICAL



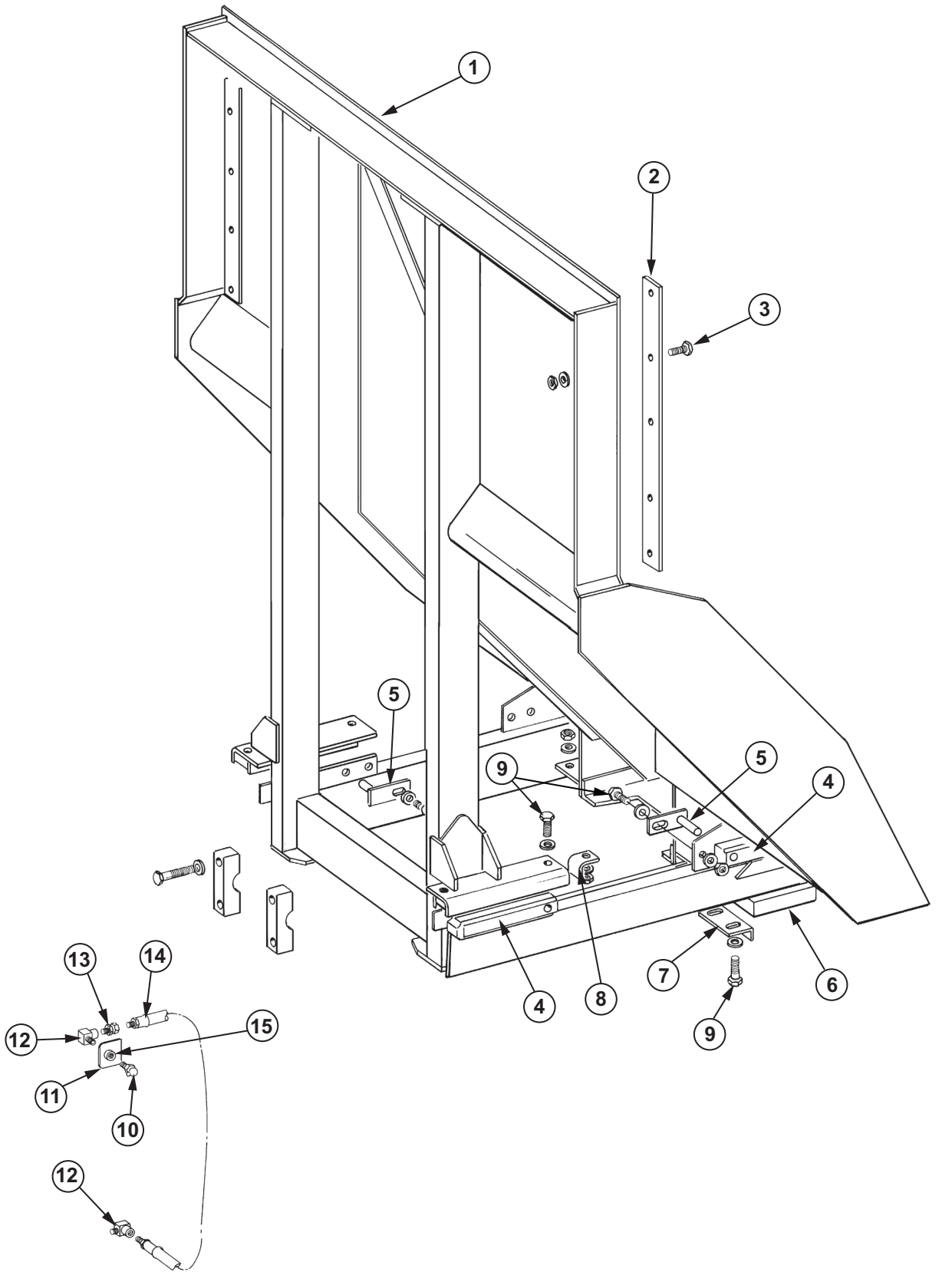
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	210900	LAMP, Clearance, Sealed	2
	606337	LAMP, Clearance, LED	2
2	210901	GROMMET	2
3	2738-0031A	PLUG, Lamp Connection (For Standard Lamp)	2
	109171	PLUG, Lamp Connection (For LED Lamp)	2
4	107488	CABLE, 13 Conductor	21 FT
5	603008	CAP, Electrical Access Hole	1
	602716	SEAL, Electrical Access Hole Cover	1
6	100839	CONDUIT, Flex 1”	7 FT
7	33179	PUSH BUTTON, Speed Up	1
8	1972-0009A	WIRE, White, #14 Gauge	25 FT
	1972-0126A	WIRE, Brown, #14 Gauge	25 FT
	1972-0115A	WIRE, Blue/White Stripe, #14 Gauge	25 FT
	107535	LAMP, Mid Body Turn (Optional) (Not Shown)	2
	107537	GROMMET, Mid Body Turn (Not Shown)	2
	107539	PLUG, Lamp Connection (Mid Body Turn) (Not Shown)	2

PUSHOUT CYLINDER MOUNTING



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	211040	WELDMENT, Bearing Block and Sleeve, Right Hand	1
	F1676	SCREW, Cap, 3/4" X 1 3/4" UNC	2
	F8075	WASHER, Lock, 3/4"	2
2	211039	WELDMENT, Bearing Block and Sleeve, Left Hand	1
	F1676	SCREW, Cap, 3/4" X 1 3/4" UNC	2
	F8075	WASHER, Lock, 3/4"	2
3	210663	PIN, Cylinder Pivot	2
4	305971	ASSEMBLY, Clamp, Cylinder Pivot	2
	F1676	SCREW, Cap, 3/4" X 1 3/4" UNC	2
	F8075	WASHER, Lock, 3/4"	2
5	210630-01	CYLINDER, Pushout, 14 yard	1
	210630-02	CYLINDER, Pushout, 16 yard	1
	210630-03	CYLINDER, Pushout, 18 yard	1
	210630-04	CYLINDER, Pushout, 20 yard	1
	210630-05	CYLINDER, Pushout, 25 yard	1
6	16170	FITTING, Grease	2
7	209744	PIN	1

PUSHOUT PANEL



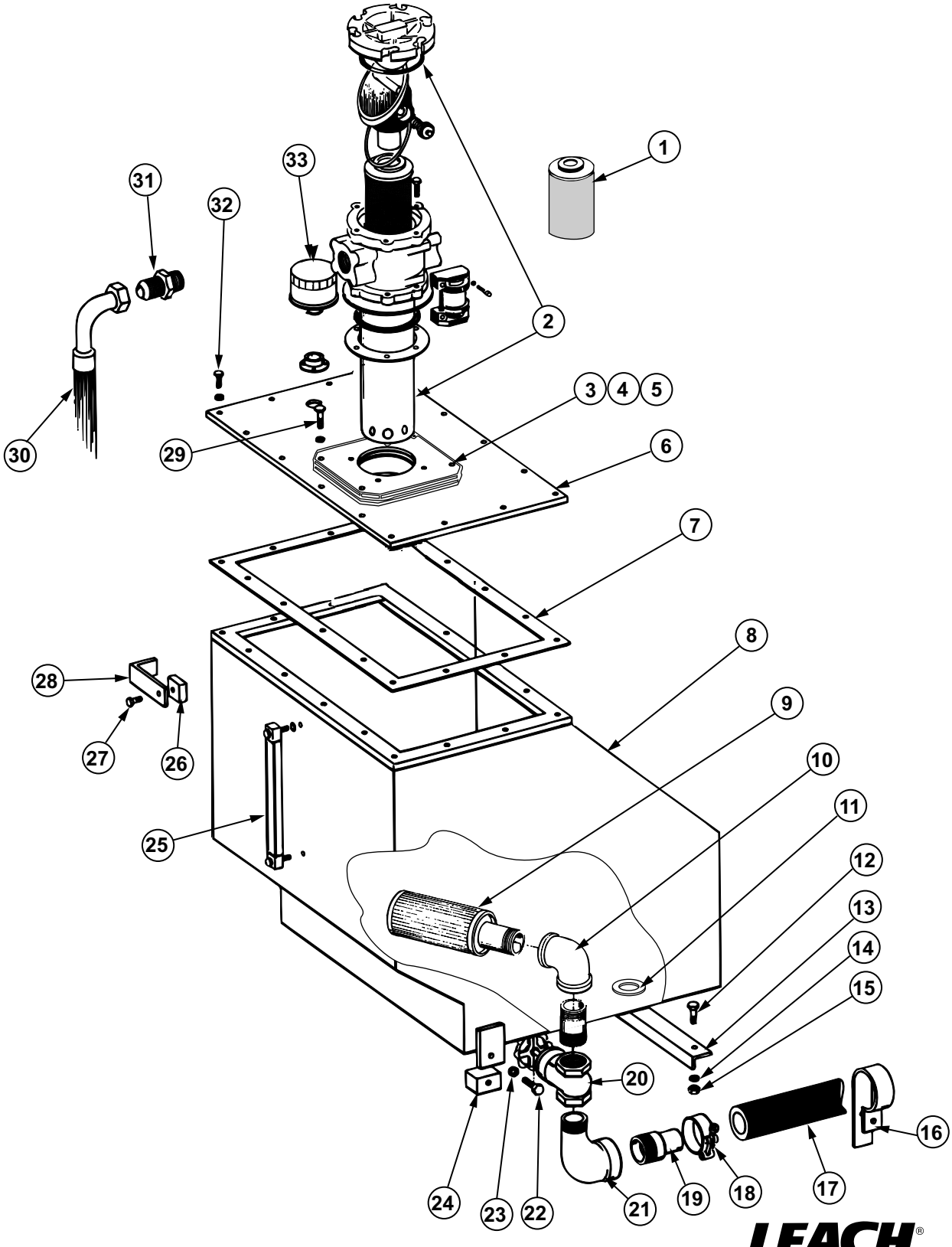
PUSHOUT PANEL

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	500647-01	WELDMENT, Pushout Panel	1
2	210964	PLATE, Face Sheet Cover	2
3	F0960	SCREW, Cap, 1/2" X 1 1/4" UNC	8
	F7350	WASHER, Flat, 1/2"	8
	F3250	NUT, 1/2" UNC	8
4	210976	SHOE, Upper	6
5	108760	WELDMENT, Shoe Retainer	4
	108755	SHIM, Shoe, Upper	As Req.
6	108762	SHOE, Lower	2
7	210979	KEEPER, Shoe, Lower	2
8	211117	KEEPER, Shoe, Upper	2
9	F1350	SCREW, Cap, 5/8" X 1 1/2" UNC	10
	F7425	WASHER, Flat, 5/8"	10
	F3500	NUT, Nylock, 5/8" UNC	10
10	16170	FITTING, Grease	1
11	108809	PLATE, Mounting, Grease Line	1
12	5407-0202	ELBOW	2
13	5402-0202	FITTING, Swivel	1
14	210949	HOSE, Grease Line	1
15	5403-0202	COUPLING	1

SECTION 4

TANK ASSEMBLY, Before Alpha/Beta s/n 4473

Delta s/n 5079



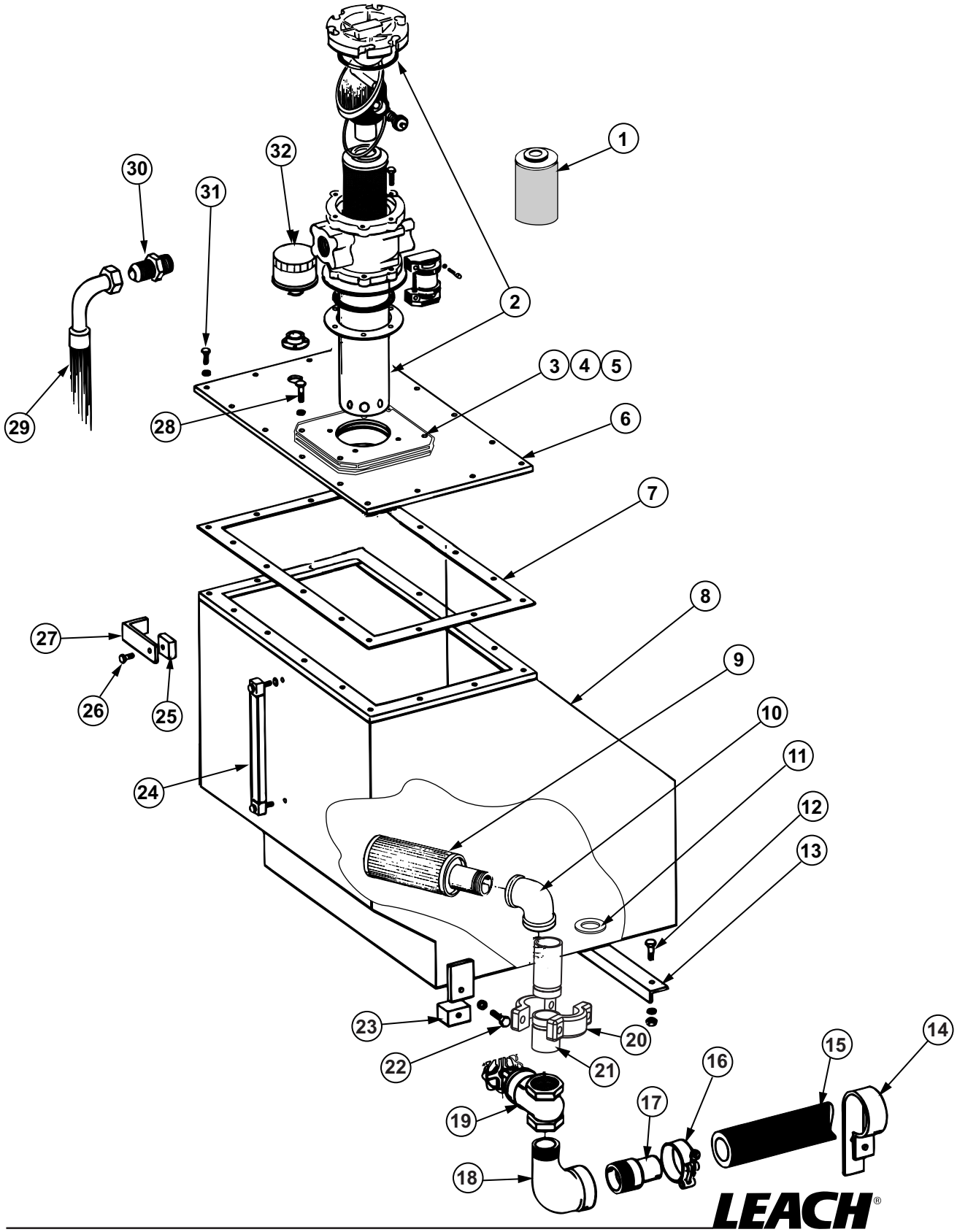
TANK ASSEMBLY, Before Alpha/Beta s/n 4473

Delta s/n 5079

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	106418	ELEMENT, Filter, 9 Micron	1
	107406	ELEMENT, Filter, 3 Micron (Clean Up Filter)	1
2	41751	ASSEMBLY, Filter, Complete	1
	17533	O-RING, Cover	1
	926783	DIVERTER, Includes Bypass Valve	1
	926616-P	VALVE, Bypass	1
	17533	O-RING, Diverter	1
	41073	GAUGE, Filter Condition	1
3	204122	GASKET	1
4	302177	ADAPTER, Filter	1
5	302179	GASKET, Adapter	1
6	207909	COVER	1
7	300055	GASKET, Cover	1
8	900165	KIT, Tank (Includes 406940 Tank)	1
9	41753	STRAINER	1
10	@0030	ELBOW	1
11	100319	MAGNET, Ceramic	1
12	F0277	SCREW, Cap, 3/8” X 1” UNC	6
13	300133	ANGLE, Support	1
14	F7875	WASHER, Lock, 3/8”	6
15	F2975	NUT, 3/8” UNC	6
16	TW-1116-2	SUPPORT, Hose	1
17	@0132	HOSE, Suction, 2”	Per Ft.
18	17913	CLAMP	2
19	SR-8580	ADAPTER	1
20	LF-1242	VALVE, Gate	1
21	@0031	ELBOW	1
22	F0910	SCREW, Cap, 1/2” X 1” UNC	2
23	F7975	WASHER, Lock, 1/2”	2
24	200755	BLOCK	2
25	41752	GAUGE, Sight	1
26	41790	PAD, Spacer	1
27	F0850	SCREW, Cap, 1/2” X 3/4” UNC	1
28	300058	BRACKET	1
29	F0176	SCREW, Cap, 5/16” X 1 1/4” UNC	2
30	107815	HOSE	1
31	107788	CONNECTOR	1
32	F0277	SCREW, Cap, 3/8” X 1” UNC	15
	F7775	WASHER, Lock, 3/8”	15
33	101348	CAP, Breather	1
	100418	ASSEMBLY, Breather	1

TANK ASSEMBLY, After Alpha/Beta s/n 4472

Delta s/n 5078

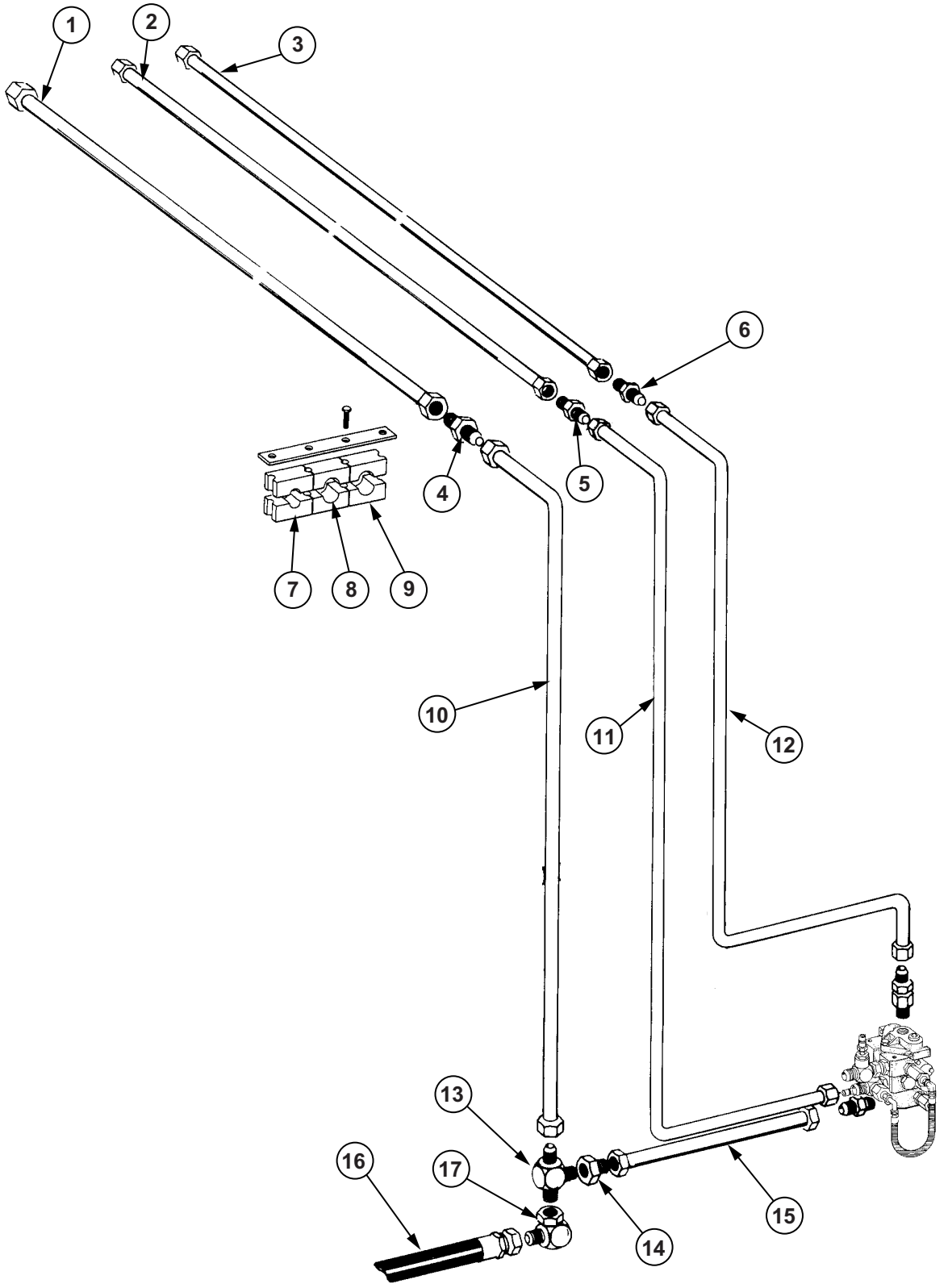


TANK ASSEMBLY, After Alpha/Beta s/n 4472

Delta s/n 5078

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	106418	ELEMENT, Filter, 9 Micron	1
	107406	ELEMENT, Filter, 3 Micron (Clean Up Filter)	1
2	41751	ASSEMBLY, Filter, Complete	1
	17533	O-RING, Cover	1
	926783	DIVERTER, Includes Bypass Valve	1
	926616-P	VALVE, Bypass	1
	17533	O-RING, Diverter	1
	41073	GAUGE, Filter Condition	1
3	204122	GASKET	1
4	302177	ADAPTER, Filter	1
5	302179	GASKET, Adapter	1
6	207909	COVER	1
7	300055	GASKET, Cover	1
8	406940	WELDMENT, Tank	1
9	41753	STRAINER	1
10	@0030	ELBOW	1
11	100319	MAGNET, Ceramic	1
12	F0277	SCREW, Cap, 3/8” X 1” UNC	6
	F7875	WASHER, Lock, 3/8"	6
	F2975	NUT, 3/8" UNC	6
13	300133	ANGLE, Support	1
14	TW-1116-2	SUPPORT, Hose	1
15	@0132	HOSE, Suction, 2”	Per Ft.
16	17913	CLAMP	2
17	SR-8580	ADAPTER	1
18	@0031	ELBOW	1
19	2910-0144B	VALVE, Ball	1
20	605998	COUPLER	1
21	605997	NIPPLE, Pipe	1
	606000	BRACKET, Support (Not Shown)	1
	16217	U-BOLT (Not Shown)	1
22	F0910	SCREW, Cap, 1/2” X 1” UNC	2
	F7975	WASHER, Lock, 1/2”	2
23	200755	BLOCK	2
24	41752	GAUGE, Sight	1
25	41790	PAD, Spacer	1
26	F0850	SCREW, Cap, 1/2” X 3/4” UNC	1
27	300058	BRACKET	1
28	F0176	SCREW, Cap, 5/16” X 1 1/4” UNC	2
29	107815	HOSE	1
30	107788	CONNECTOR	1
31	F0277	SCREW, Cap, 3/8” X 1” UNC	15
	F7775	WASHER, Lock, 3/8”	15
32	101348	CAP, Breather	1
	100418	ASSEMBLY, Breather	1

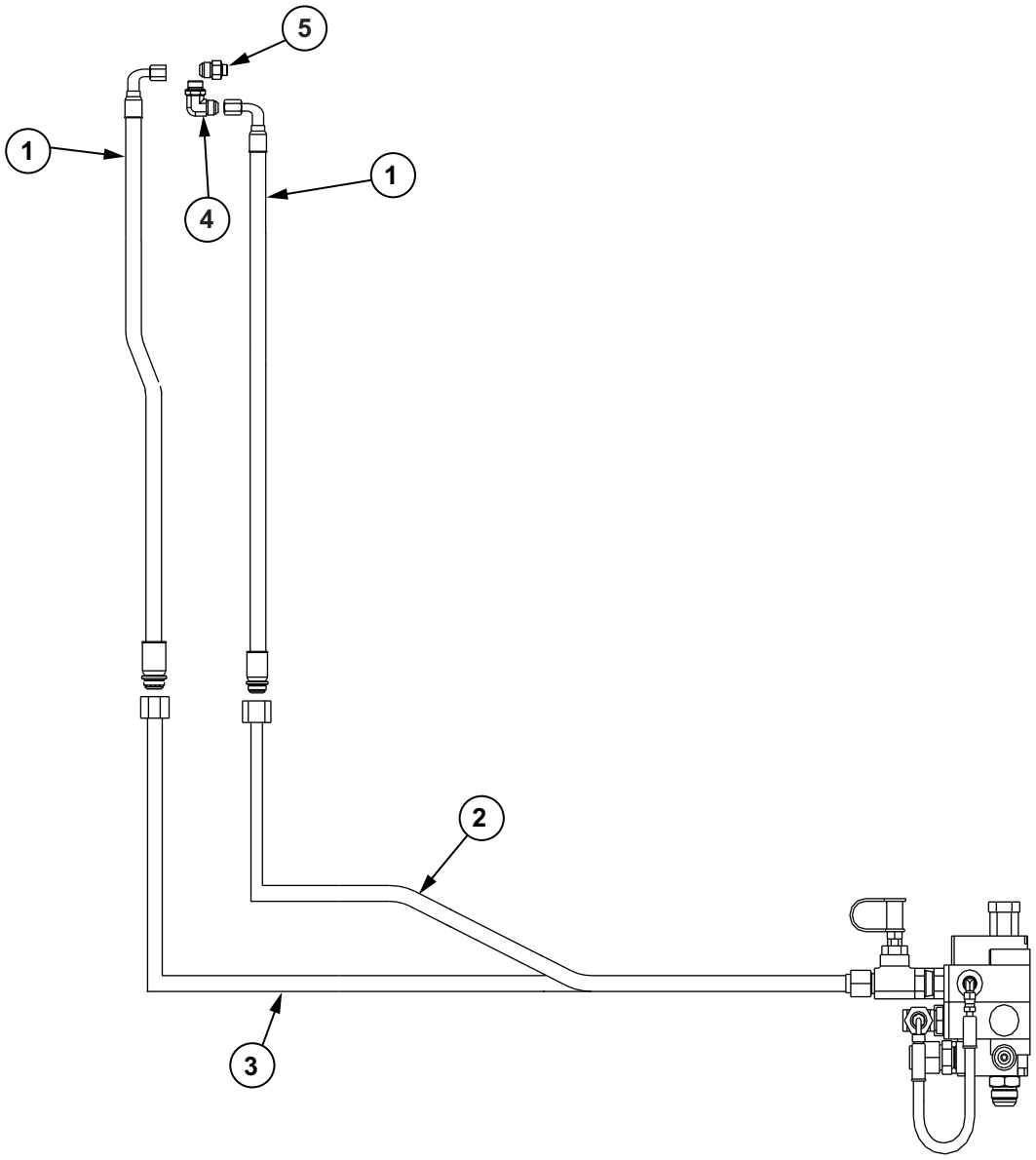
TOP AND FRONT HYDRAULICS



TOP AND FRONT HYDRAULICS

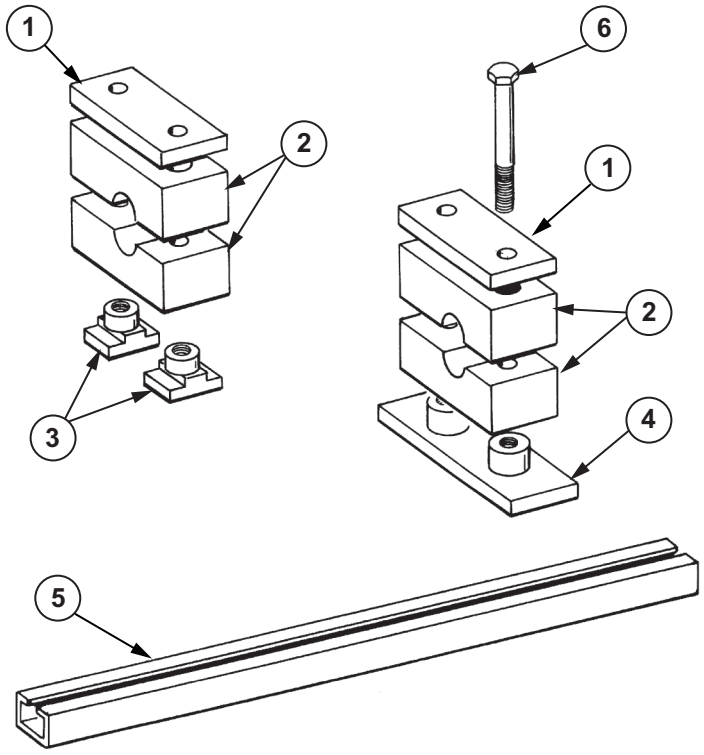
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	211415	TUBE ASSEMBLY, Return, 14 yard	1
	211270	TUBE ASSEMBLY, Return, 16 yard	1
	211416	TUBE ASSEMBLY, Return, 18 yard	1
	210799	TUBE ASSEMBLY, Return, 20 yard	1
	211292	TUBE ASSEMBLY, Return, 25 yard	1
2	211413	TUBE ASSEMBLY, Tailgate Lift, 14 yard	1
	211271	TUBE ASSEMBLY, Tailgate Lift, 16 yard	1
	211414	TUBE ASSEMBLY, Tailgate Lift, 18 yard	1
	210800	TUBE ASSEMBLY, Tailgate Lift, 20 yard	1
	211293	TUBE ASSEMBLY, Tailgate Lift, 25 yard	1
3	211411	TUBE ASSEMBLY, Supply, 14 yard	1
	211272	TUBE ASSEMBLY, Supply, 16 yard	1
	211412	TUBE ASSEMBLY, Supply, 18 yard	1
	210801	TUBE ASSEMBLY, Supply, 20 yard	1
	211294	TUBE ASSEMBLY, Supply, 25 yard	1
4	16123	UNION, Male	1
5	16215	UNION, Male	1
6	32471	UNION, Male	1
7	100364	TUBE SUPPORT, 1 1/4"	3
8	100363	TUBE SUPPORT, 3/4"	3
9	102624	TUBE SUPPORT, 1"	3
10	210802	TUBE ASSEMBLY, Return Front	1
11	210814	TUBE ASSEMBLY, Tailgate Lift	1
12	406690	TUBE ASSEMBLY, Front Supply	1
13	16224	FITTING, Union Tee	1
14	100272	FITTING, Reducer	2
15	210815	TUBE ASSEMBLY, Return From Valve	1
16	107815	HOSE	1
17	16222	ELBOW	1

PUSHOUT CYLINDER HYDRAULICS



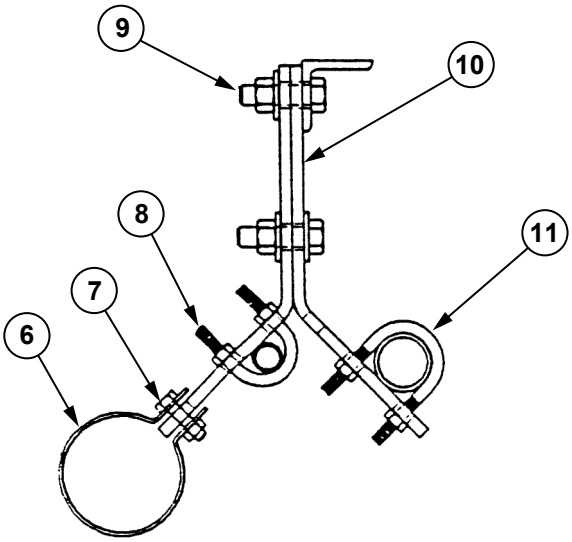
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	210889	HOSE, Pushout Cylinder	2
2	406728	ASSEMBLY, Tube, Pushout Extend	1
	100363	SUPPORT, Tube (Not Shown)	1
3	406727	ASSEMBLY, Tube, Pushout Retract	1
4	17652	FITTING, 90 Degree (Extend Port)	1
5	100284	CONNECTOR (Retract Port)	1
	100363	SUPPORT, Tube (Not Shown)	1

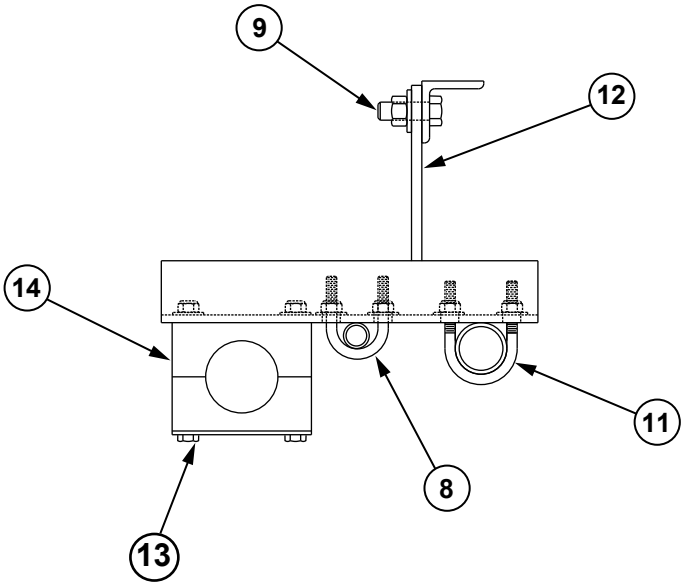
TUBE SUPPORTS

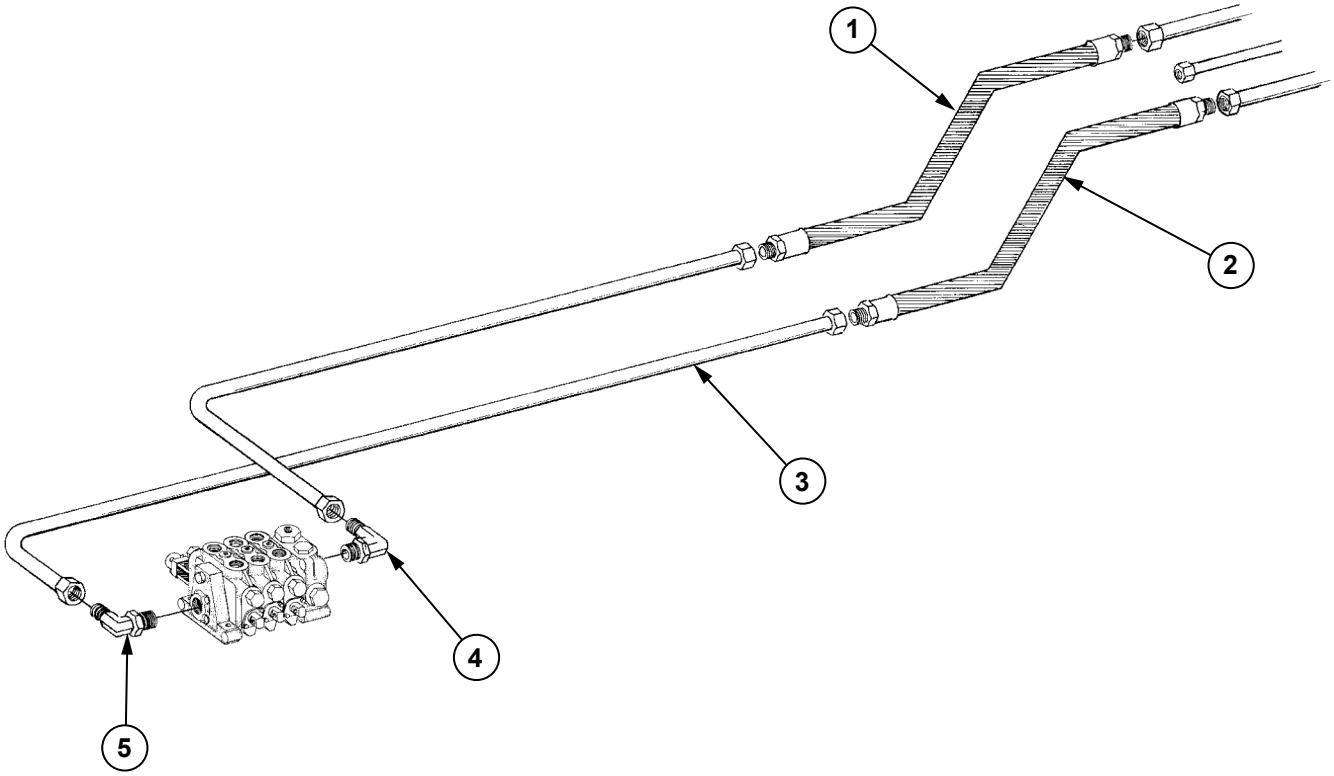


REF. NO.	PART NO.	DESCRIPTION	QTY.
1	107630-06	PLATE, Cover (For 3/4" Tube Support)	AR
	107630-06	PLATE, Cover (For 1" Tube Support)	AR
	107630-07	PLATE, Cover (For 1 1/4" Tube Support)	AR
2	209656-09	CUSHION, 3/4" (Set of Two)	AR
	209656-10	CUSHION, 1" (Set of Two)	AR
	209656-11	CUSHION, 1 1/4" (Set of Two)	AR
3	100365	NUT, Rail	AR
4	NSS	BASE, Weld Style	AR
5	209751	RAIL, Tube Support,10 3/4" Long	AR
6	F0500	SCREW, Cap, 3/8" X 2 1/4" UNC (For 3/4" and 1" Supports)	AR
	F0555	SCREW, Cap, 3/8" X 2 3/4" UNC (For 1 1/4" Support)	AR
	100363	SUPPORT, Tube, 3/4", Rail Style (Includes Items 1,2,3,6)	AR
	102624	SUPPORT, Tube, 1", Rail Style (Includes Items 1,2,3,6)	AR
	100364	SUPPORT, Tube, 1 1/4", Rail Style (Includes Items 1,2,3,6)	AR
	100361	SUPPORT, Tube, 3/4", Weld Style (Includes Items 1,2,4,6)	AR
	100875	SUPPORT, Tube, 1", Weld Style (Includes Items 1,2,4,6)	AR
	100345	SUPPORT, Tube, 1 1/4",Weld Style (Includes Items 1,2,4,6)	AR

MAIN CONTROL VALVE (MCV) SUPPLY AND RETURN



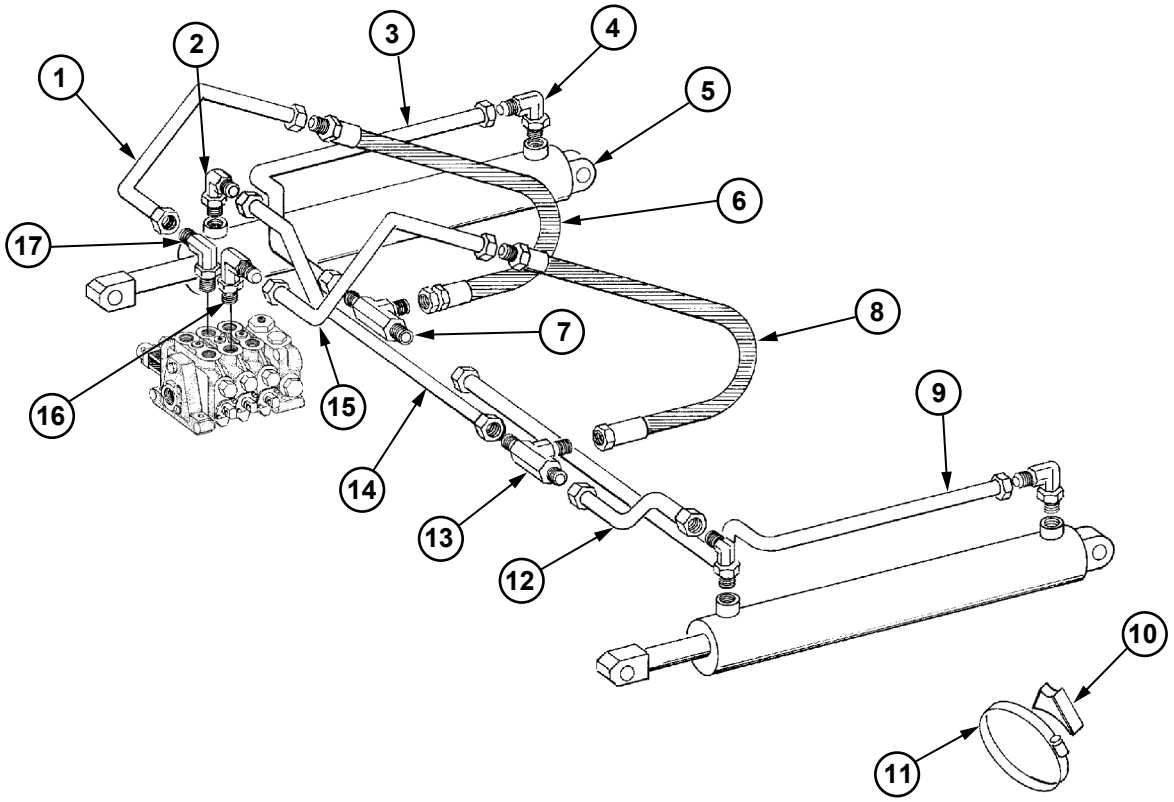




MAIN CONTROL VALVE SUPPLY AND RETURN

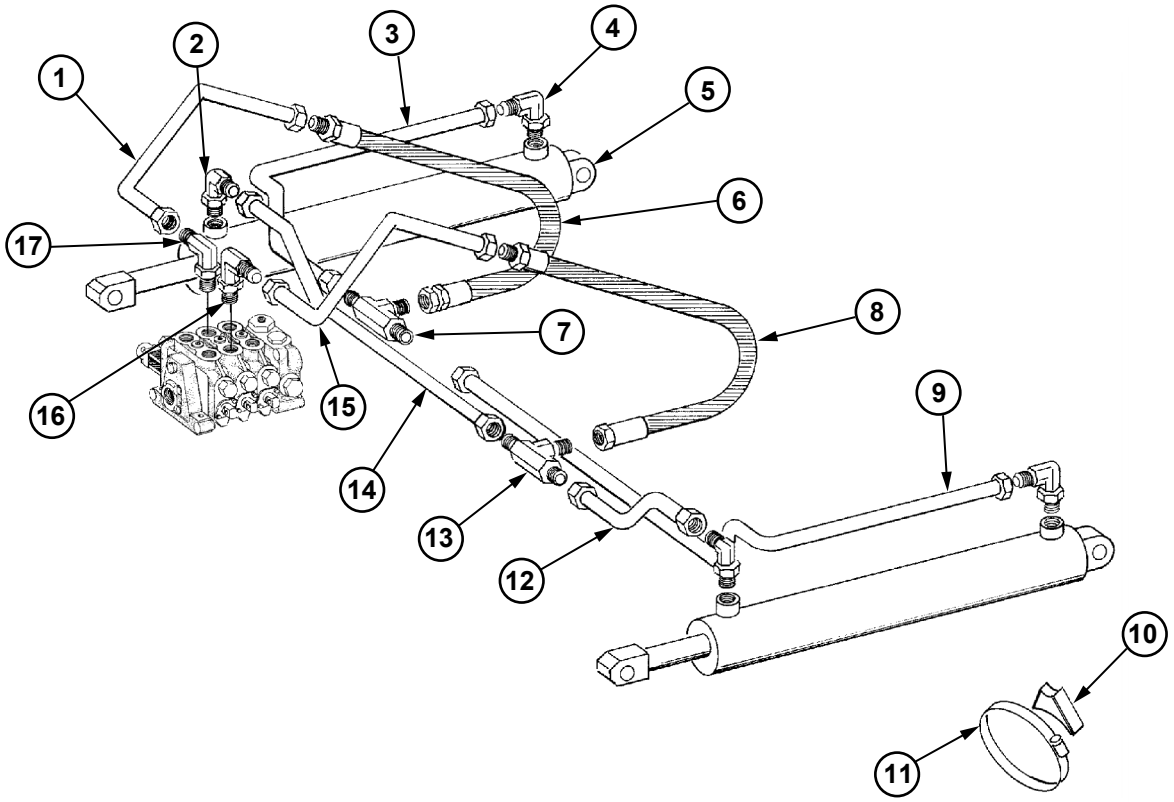
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	211279	HOSE, Supply	1
2	601792	HOSE, Return	1
3	601787	TUBE, Return	1
4	16115	FITTING, Alpha, Beta	1
	16117	FITTING, Delta, Before s/n 5052	1
	16115	FITTING, Delta, After s/n 5051	1
5	16226	ELBOW, 90 Degree	1
	109083	ADAPTER, Delta, Before s/n 5052	1
6	302635	HOSE CLAMP, Alpha, Beta Before s/n 4582 Delta Before s/n 5085	1
7	F0024	CAPSCREW, 1/4" X 1" UNC	1
	F7075	WASHER, Flat 1/4"	2
	F2275	NUT, Hex, 1/4" UNC	1
8	16208	U-BOLT	1
9	F0980	CAPSCREW, 1/2" X 1 1/2" UNC	2
	F7350	WASHER, Flat, 1/2"	2
	F3325	NUT, Hex, 1/2" UNC	2
10	601904	BRACKET, Tube Support, Alpha, Beta Before s/n 4582 Delta Before s/n 5085	2
11	18276	U-BOLT	1
12	605896	BRACKET, Tube Support, Alpha, Beta After s/n 4581 Delta After s/n 5084	1
13	F0062	CAPSCREW, 1/4" X 3 3/4" UNC	2
	F2775	NUT, Elastic Stop, 1/4" UNC	2
	F7075	WASHER, Flat 1/4"	2
14	209656-07	CUSHION, 1 3/4"	1
	107630-04	PLATE, Cover	1
	900153	KIT, Tube Support, Alpha, Beta Before s/n 4582 Delta Before s/n 5085, Includes (Items, 8, 9, 11, 12, 13, 14)	1
	601902	KIT, Hydraulic Return Line, Alpha, Beta Before s/n 4046 Delta Before s/n 5052, (Includes Items 1, 2, 3, 8, 9, 11, 12, 13, 14)	1

PACKER CYLINDER HYDRAULICS-ALPHA/BETA



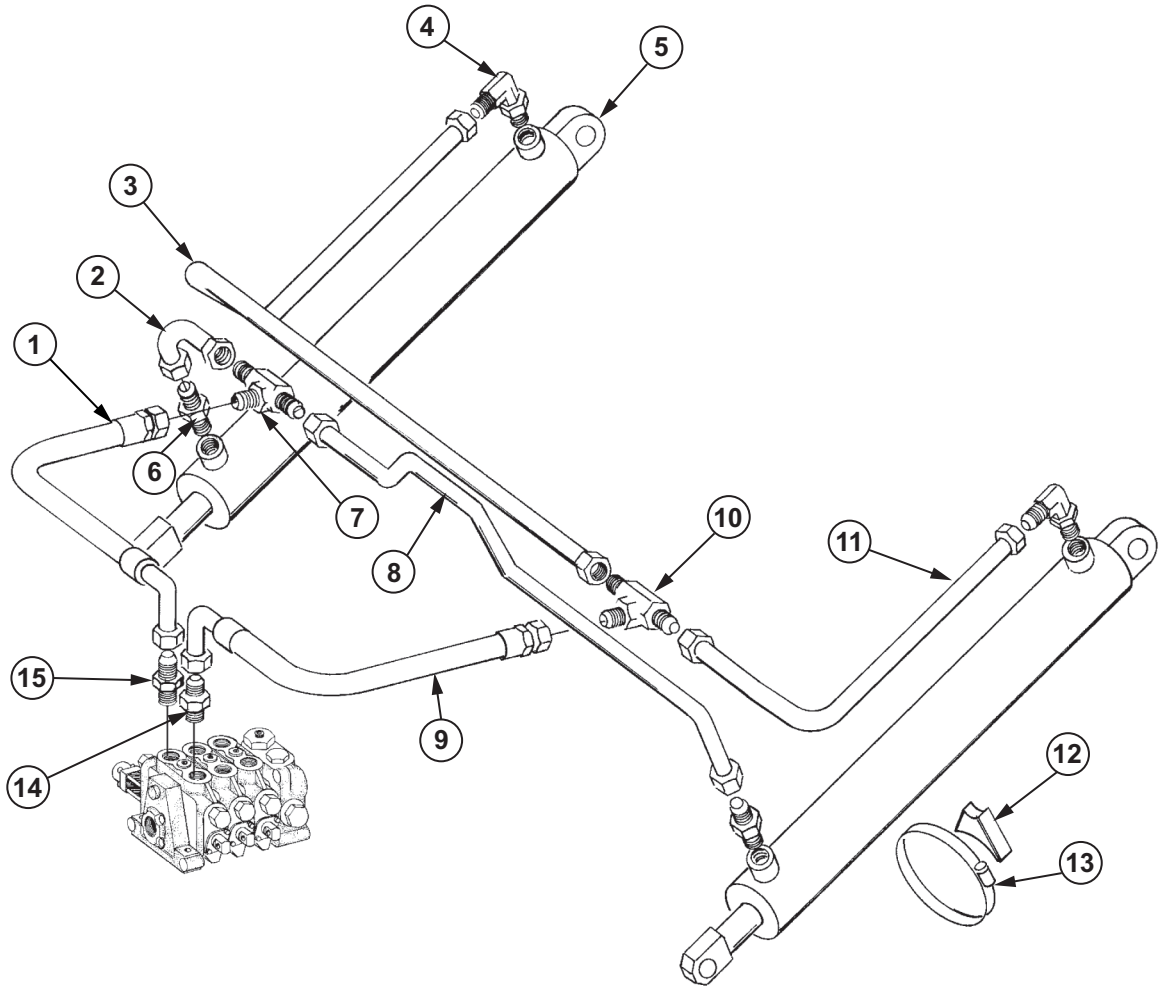
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	307054	TUBE	1
	18276	U-BOLT (Not Shown)	1
	210920	BRACKET, Tube Support (Not Shown)	1
2	18008	FITTING, 90 Degree, O-ring, Alpha	2
	16220	FITTING, 90 Degree, O-ring, Beta	2
3	307056	TUBE, Packer Cylinder Case End, Left Hand	1
4	16119	FITTING, 90 Degree, O-ring, Alpha	2
	16226	FITTING, 90 Degree, O-ring, Beta	2
5	210658	CYLINDER, Packer, Alpha	2
	406578	CYLINDER, Packer, Beta	2
6	210874	HOSE, Packer Cylinder Extend	1
7	16224	FITTING, Union Tee	1
8	210873	HOSE, Packer Cylinder Retract	1
9	307055	TUBE, Packer Cylinder Case End, Right Hand	1
10	307087	TUBE REST	2
11	2127-0064A	CLAMP	2
12	210796	TUBE, Packer Cylinder Rod End, Right Hand	1
13	33447	FITTING, Union Tee	1
14	210797	TUBE, Packer Cylinder Rod End, Left Hand	1
15	307053	TUBE	1
	2899-0001A	U-BOLT (Not Shown)	1
	210920	BRACKET, Tube Support (Not Shown)	1
16	18008	ELBOW	1
17	16226	ELBOW	1

PACKER CYLINDER HYDRAULICS-DELTA



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	307465	TUBE	1
	2899-0001A	U-BOLT (Not Shown)	1
	210920	BRACKET, Tube Support (Not Shown)	1
2	18008	FITTING, 90 Degree, O-ring	2
3	307061	TUBE, Packer Cylinder Case End, Left Hand	1
4	18008	FITTING, 90 Degree, O-ring	2
5	601366	CYLINDER, Packer	2
6	211180	HOSE, Packer Cylinder Extend	1
7	33447	FITTING, Union Tee	1
8	210873	HOSE, Packer Cylinder Retract	1
9	307060	TUBE, Packer Cylinder Case End, Right Hand	1
10	307087	TUBE REST	2
11	2127-0064A	CLAMP	2
12	210796	TUBE, Packer Cylinder Rod End, Right Hand	1
13	33447	FITTING, Union Tee	1
14	210797	TUBE, Packer Cylinder Rod End, Left Hand	1
15	307053	TUBE	1
	2899-0001A	U-BOLT (Not Shown)	1
	210920	BRACKET, Tube Support (Not Shown)	1
16	18008	ELBOW	1
17	16226	ELBOW	1

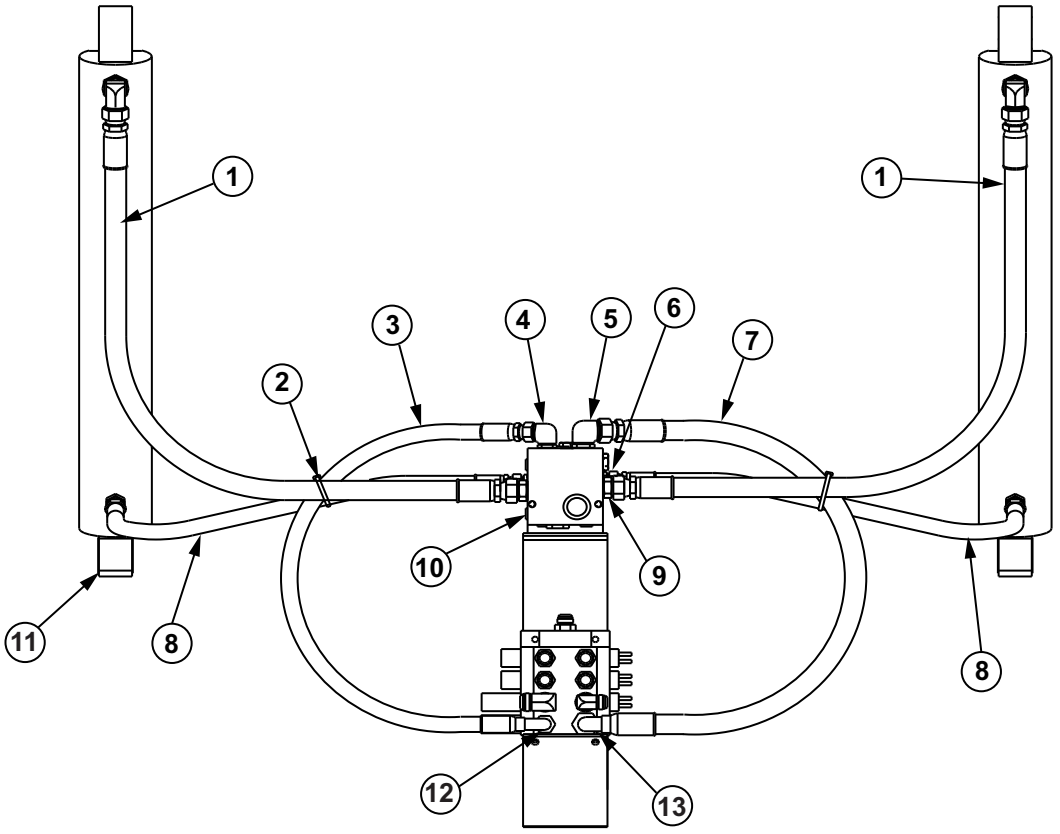
CARRIER CYLINDER HYDRAULICS - ALPHA/BETA



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	210872	HOSE, Carrier Cylinder, Retract	1
2	210790	TUBE, Carrier Cylinder, Rod End, Left Hand	1
3	307051	TUBE, Carrier Cylinder, Case End, Left Hand	1
4	16119	FITTING, 90¡ O-Ring	2
5	210659	CYLINDER, Carrier	2
6	16115	FITTING	2
7	33447	FITTING, Union Tee	1
8	211186	TUBE, Carrier Cylinder, Rod End, Right Hand	1
9	210871	HOSE, Carrier Cylinder, Extend	1
10	16224	FITTING, Union Tee	1
11	307052	TUBE, Carrier Cylinder, Case End, Right Hand	1
12	307087	TUBE REST	2
13	2127-0021A	CLAMP, Hose	2
14	16227	FITTING	
15	16115	FITTING	

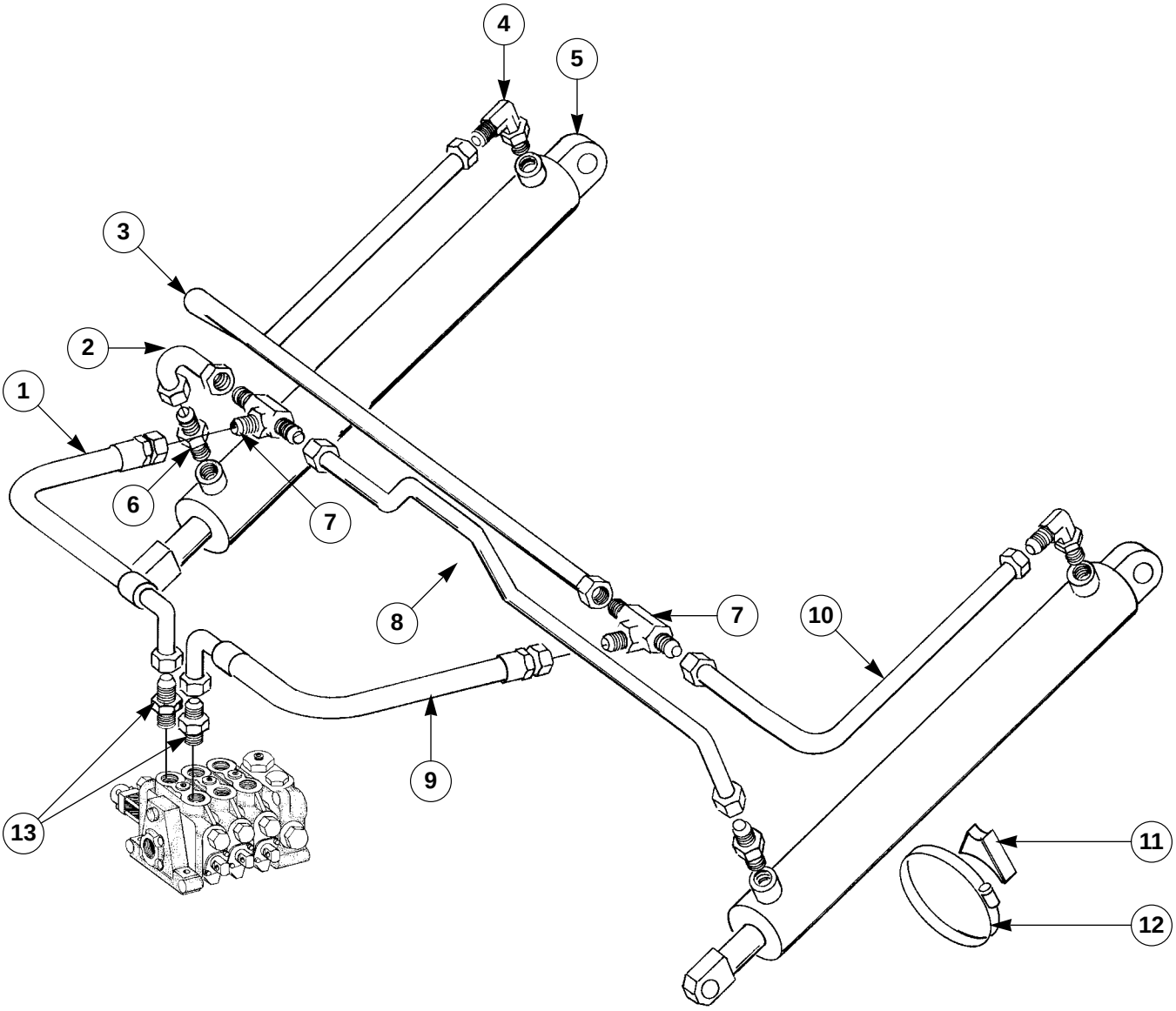
CARRIER CYLINDER HYDRAULICS - ALPHA/BETA

WITH REGEN CIRCUIT



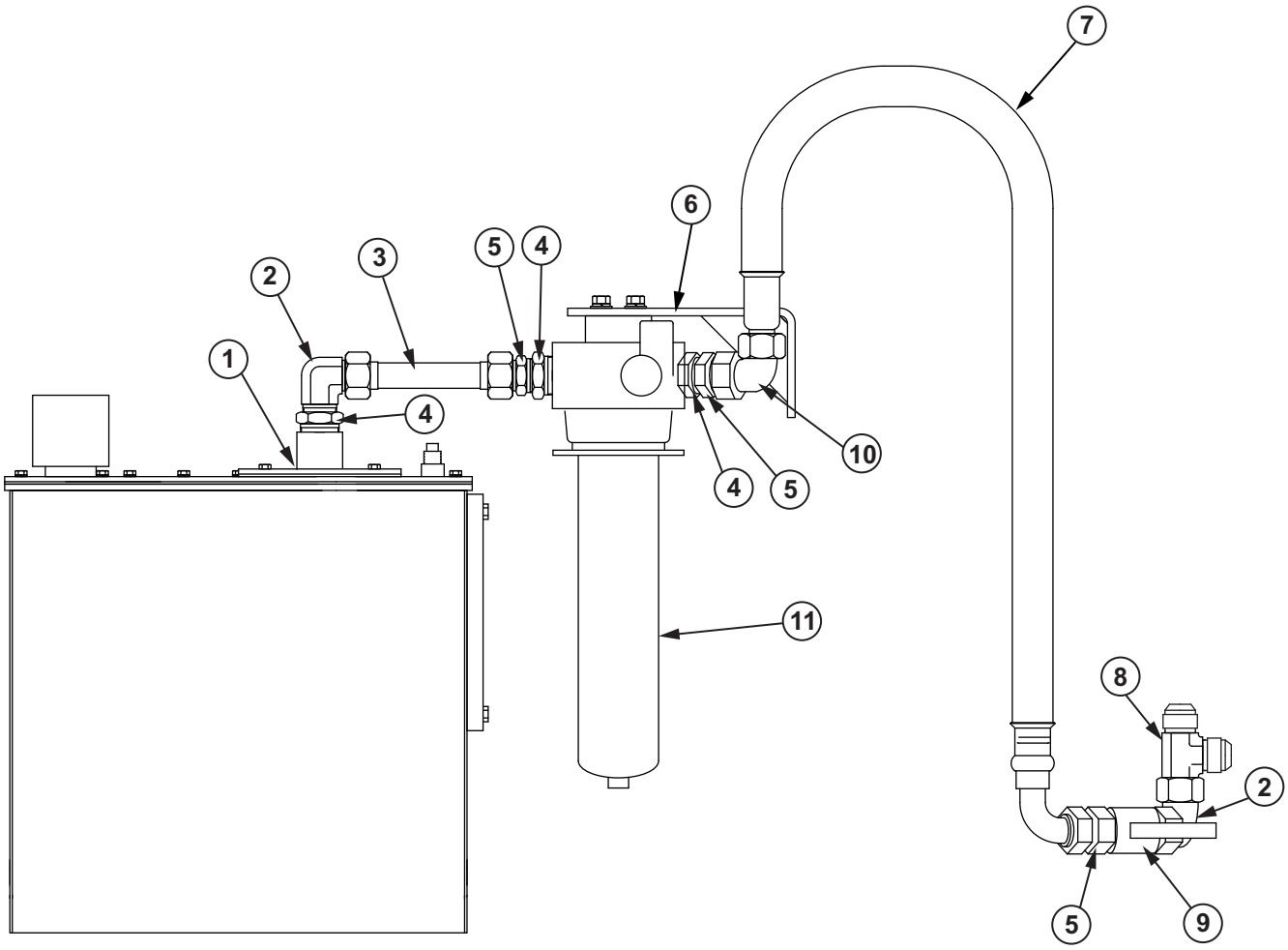
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	603305	HOSE, Assembly	2
2	106415	TIE RAP	2
3	605282	HOSE, Assembly	1
4	18008	FITTING, 90 Degree Elbow	1
5	16226	FITTING, 90 Degree Elbow	1
6	16115	CONNECTOR, O-Ring	4
7	605283	HOSE, Assembly	1
8	605297	HOSE, Assembly	2
9	16227	FITTING, Straight	2
10	204100	VALVE, Regenerative	1
11	210659	CYLINDER, Carrier	2
12	16115	FITTING	2
13	16227	FITTING	2

CARRIER CYLINDER HYDRAULICS – DELTA



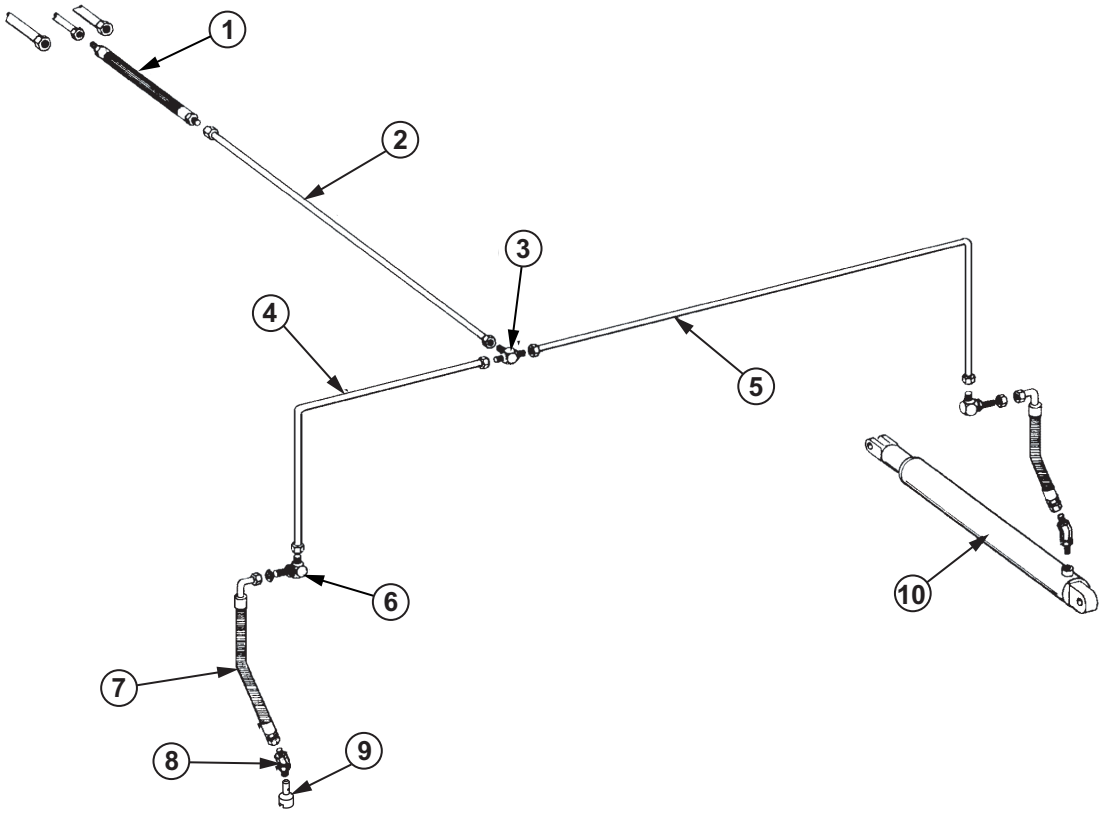
REF. NO	PART NO.	DESCRIPTION	QTY.
1	210872	HOSE, Carrier Cylinder, Retract	1
2	210790	TUBE, Carrier Cylinder, Rod End, Left Hand	1
3	307498	TUBE, Carrier Cylinder, Case End, Left Hand	1
4	18008	FITTING, 90° O-Ring	2
5	210628	CYLINDER, Carrier	2
6	16115	FITTING	2
7	33447	FITTING, Union Tee	2
8	211337	TUBE, Carrier Cylinder, Rod End, Right Hand	1
9	211179	HOSE, Carrier Cylinder, Extend	1
10	307499	TUBE, Carrier Cylinder, Case End, Right Hand	1
11	307087	TUBE REST	2
12	2127-0064A	CLAMP, Hose	2
13	16117	FITTING	2

SPIN - ON FILTER (OPTIONAL)



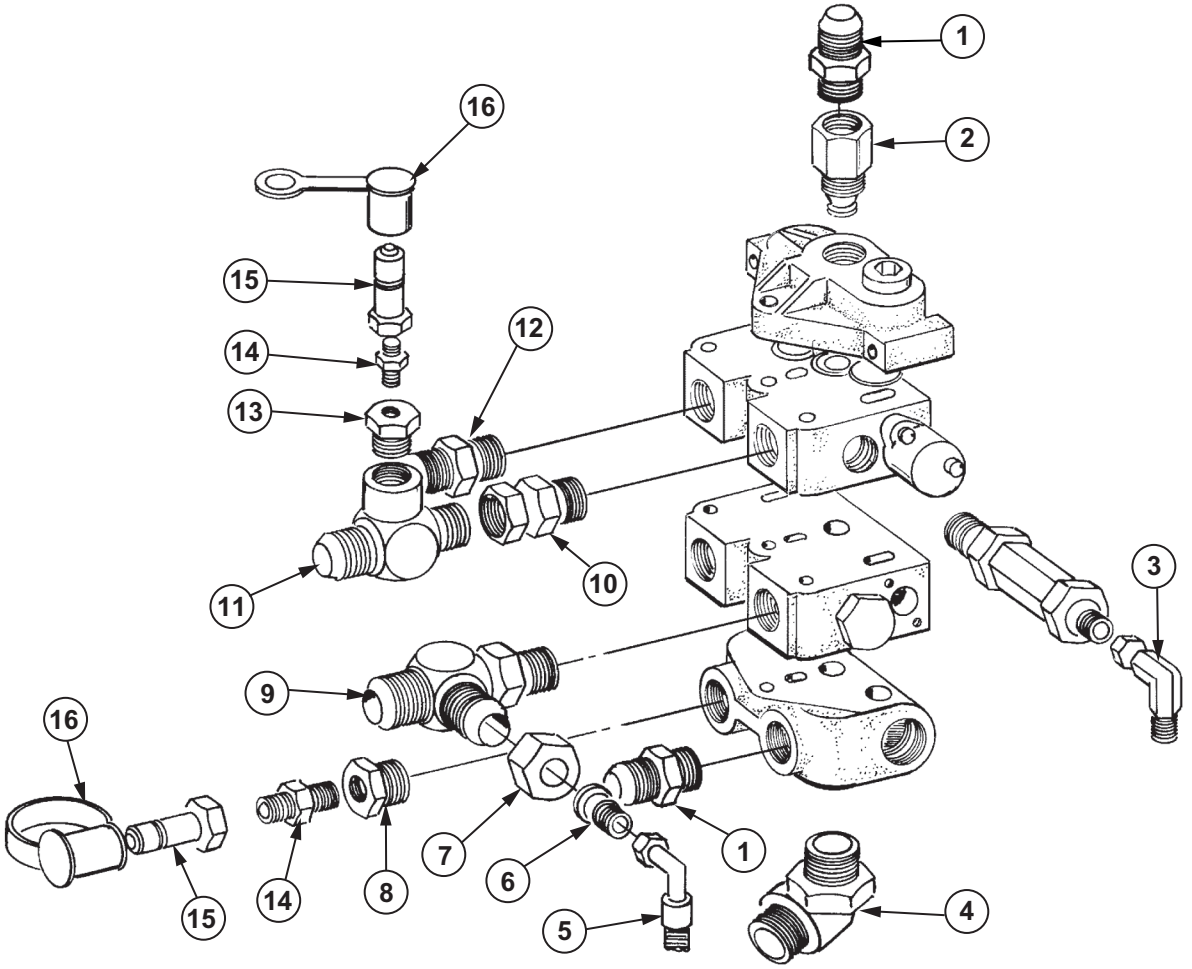
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	203474	WELDMENT, Base Adapter Plate	1
2	1358	ELBOW	2
3	211421	ASSEMBLY, Tube	1
4	@0090	BUSHING, Reducer	3
5	16122	CONNECTOR	1
6	307554	BRACKET, Filter Mounting	1
7	107815	HOSE	1
8	17665	TEE	1
9	106501	BALL VALVE	1
10	16222	ELBOW	1
11	202274	ASSEMBLY, Filter, Spin-On (Includes Element)	1
	101730	ELEMENT, Filter	1

TAILGATE LIFT HYDRAULICS



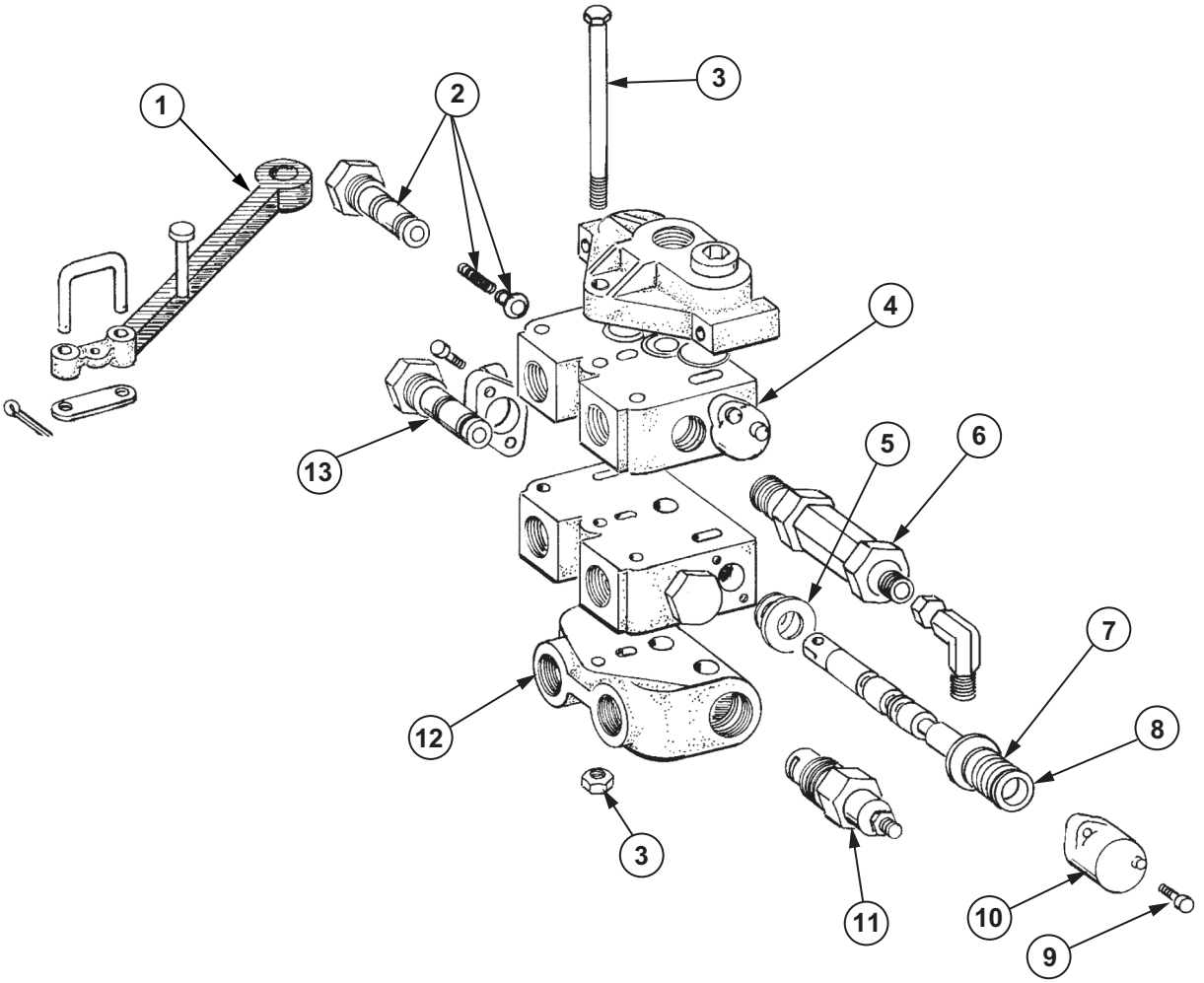
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	601815	HOSE ASSEMBLY	1
2	601816	TUBE ASSEMBLY	1
3	18268	TEE	1
4	210783	TUBE ASSEMBLY	1
5	210784	TUBE ASSEMBLY	1
6	100137	ELBOW	2
	41876	WASHER	2
7	210876	HOSE ASSEMBLY	2
8	108777	ELBOW	2
9	701845	RESTRICTOR PIN (Alpha/Beta After s/n 4752 Delta After s/n 5093)	2
10	210629	CYLINDER ASSEMBLY (Alpha/Beta Before s/n 4753, Delta Before s/n 5094	2
	701479	CYLINDER ASSEMBLY (Alpha/Beta After s/n 4752, Delta After s/n 5093)	2

FRONT CONTROL VALVE (FCV) INSTALLATION



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	16117	FITTING, FCV (Inlet) (Outlet)	2
2	940007	FITTING, FCV Power Beyond	1
3	38702	ELBOW, Tube End	1
4	16220	ELBOW	1
5	210859	HOSE, Pilot	1
6	104458	REDUCER, Tube End	1
7	SR-7726-1	TUBE NUT	1
8	16112	ADAPTER	1
9	108792	FITTING, Tee	1
10	5644-1212	ADAPTER, Straight O-Ring	1
11	5633-1212	FITTING, Tee	1
12	16214	FITTING	1
13	30131	REDUCER	1
14	102126	NIPPLE, Pipe-male	2
15	100369	TEST NIPPLE	2
16	102823	DUST CAP	2

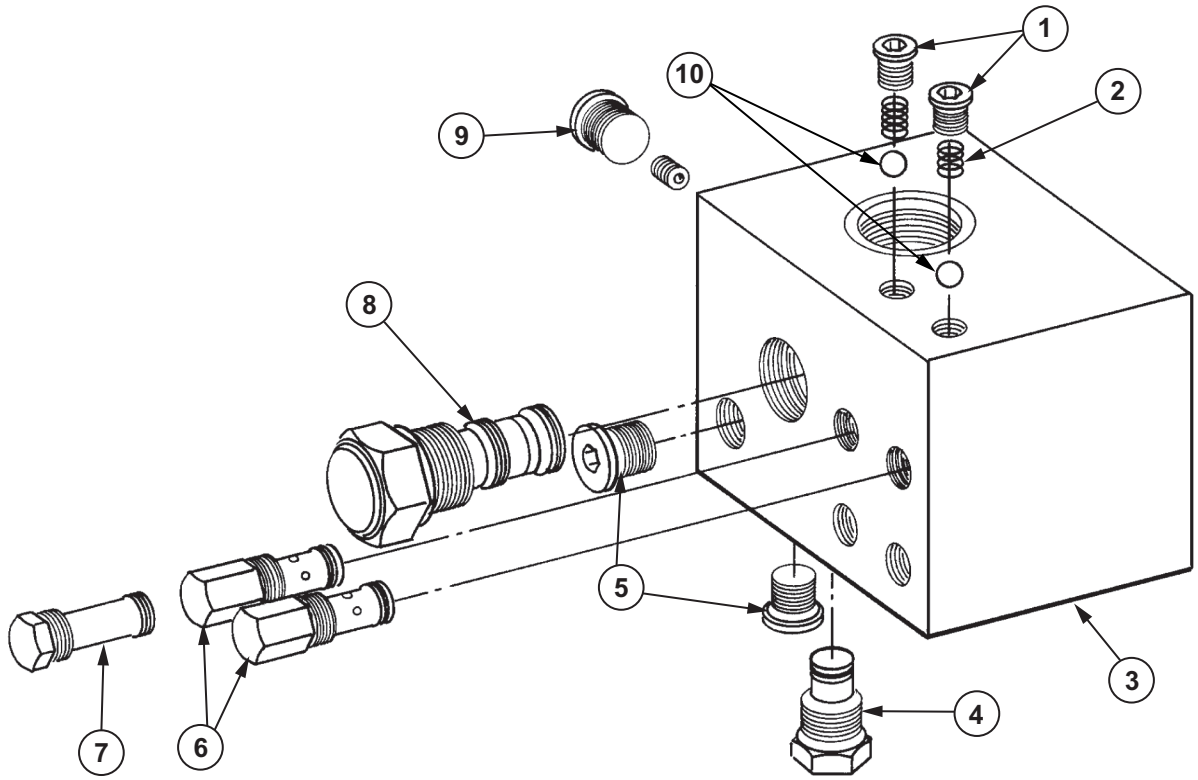
FRONT CONTROL VALVE



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	108295	KIT, Handle	2
2	940042	PLUG, Load Check	1
3	940011	KIT, Stud	1
4	940014	SECTION, Pushout	1
5	950006	KIT, Spool Seal	2
6	601104	RELIEF, Two Stage, Work Port (Can use 109044)	1
7	940044	SPRING	2
8	940053	COLLAR, Spring	2
9	940047	SCREW	4
10	940043	BONNET	2
11	601103	CARTRIDGE, Main Relief	1
12	940012	SECTION, Tailgate	1
13	940045	PLUG	1
	406750-01	ASSEMBLY, Valve, Front Control, Alpha	
	601326	ASSEMBLY, Valve, Front Control, Beta	
	406751-01	ASSEMBLY, Valve, Front Control, Delta	

VALVE - TIPPER DIVERTER 101204

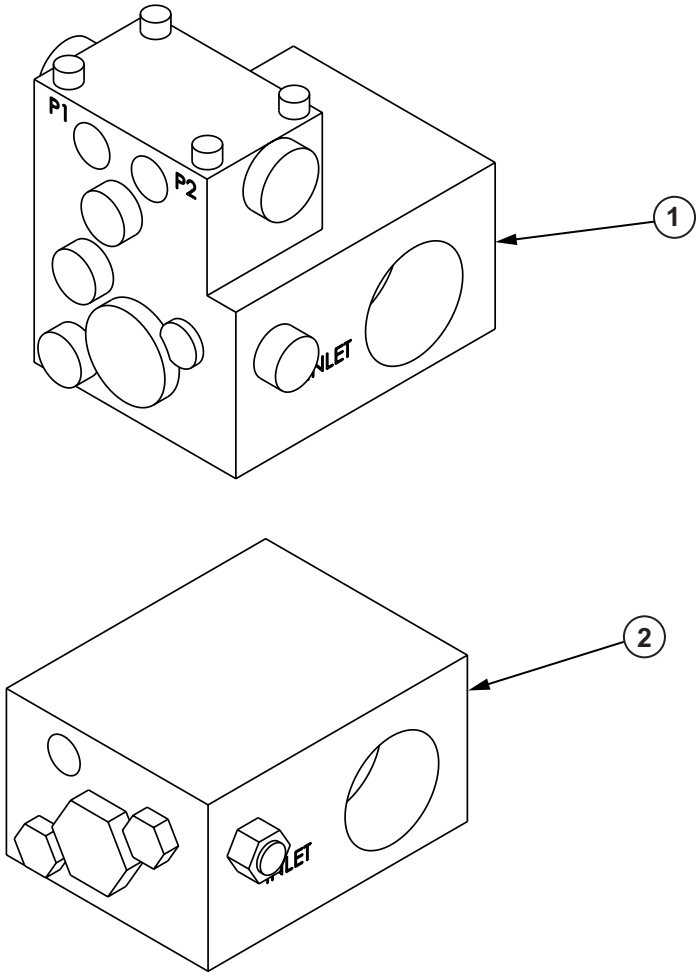
(BEFORE ALPHA/BETA S/N 4226, DELTA S/N 5052)



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	103325	PLUG, O-Ring	2
2	102630	SPRING	2
3	N/A	BODY, Valve	1
4	102629	PLUG, Relief	1
5	103327	PLUG, O-Ring	2
6	102646	CARTRIDGE, Flow Reg. 1.4 GPM	2
	102647	CARTRIDGE, Flow Reg. 2.5 GPM	2
	102648	CARTRIDGE, Flow Reg. 3.5 GPM	2
7	9729-0006A	PLUG, O-Ring (Replaces One Cartridge On Single Tipper)	1
8	601333	VALVE, Differential Pressure	1
9	103326	PLUG, O-Ring	1
10	102631	BALL	2
	101204	VALVE, Tipper Control, (Less Items 6 & 7)	1
	210931	BRACKET, Tipper Valve	1

VALVE - TIPPER DIVERTER

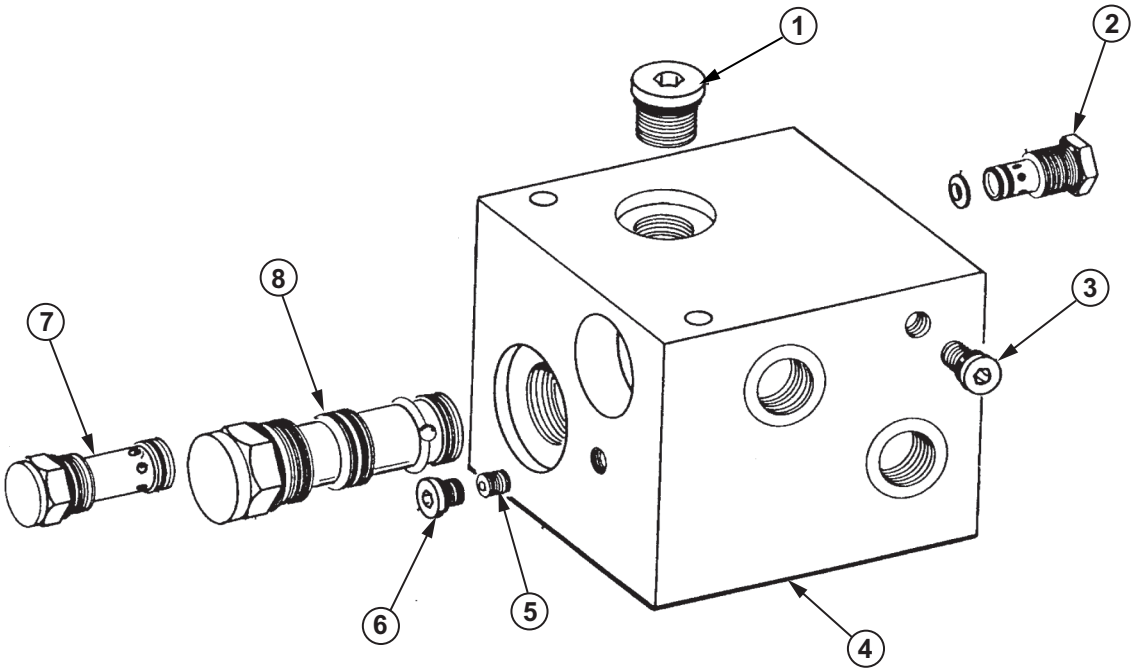
AFTER ALPHA/BETA S/N 4225, DELTA 5051



VALVE COMPONENTS NOT SOLD SEPARATE

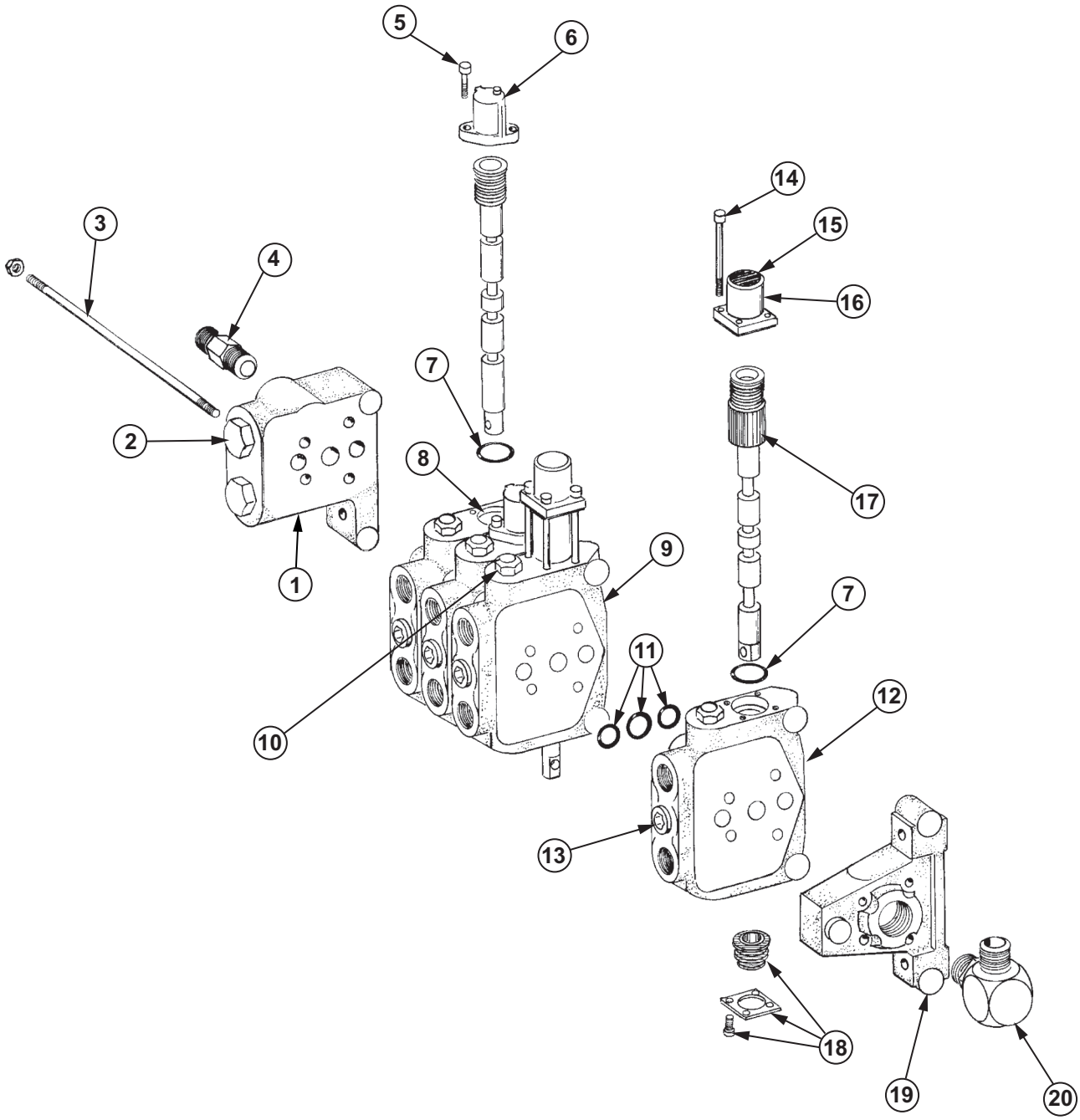
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	603362	VALVE, Diverter , Dual	1
2	603360	VALVE, Diverter , Single	1

VALVE - REGEN, 204100



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	103608	PLUG, SAE # 20	1
2	103451	VALVE, Check	1
3	100975	PLUG, SAE # 8	1
4	NSS	BODY	1
5	103448	ORIFICE PLUG	1
6	100975	PLUG, SAE # 8	1
7	103454	VALVE, Check	1
8	103452	CARTRIDGE, Pressure Differential	1
	204100	VALVE, Assembly, Regen	1

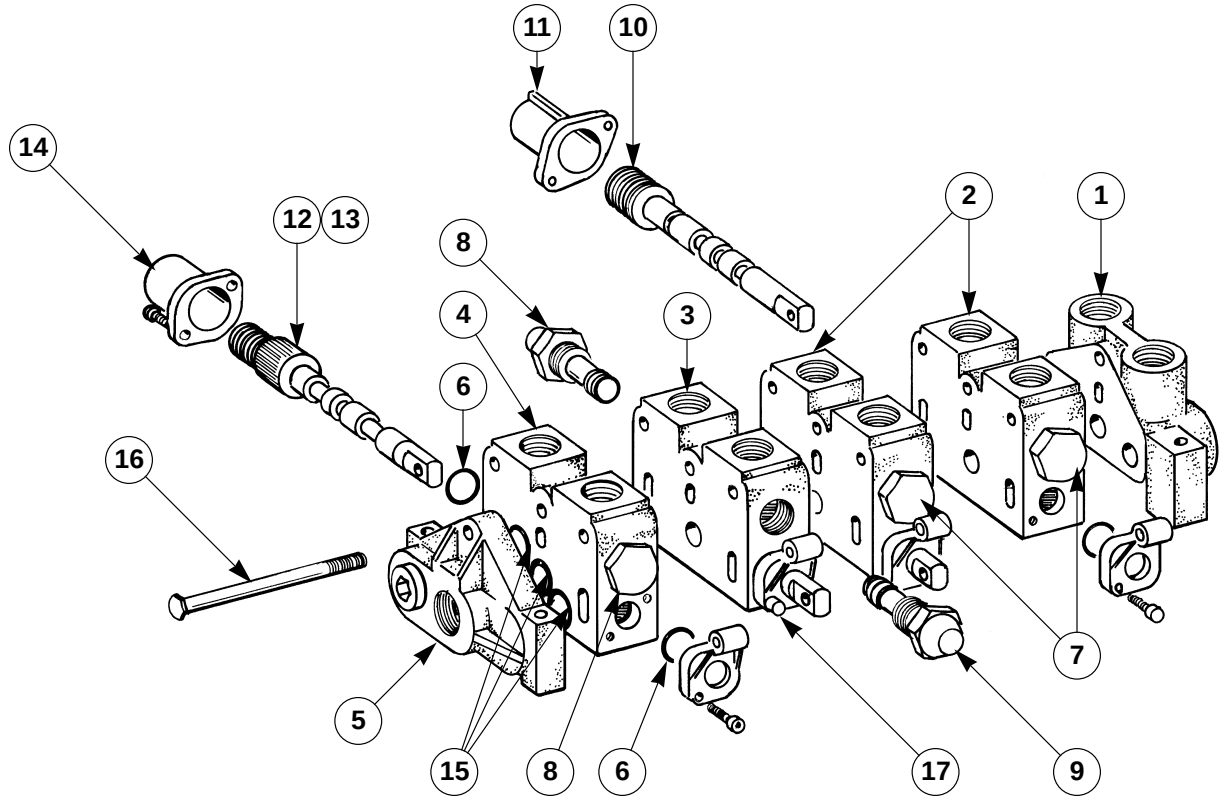
MAIN CONTROL VALVE (MCV) - ALPHA/BETA



MAIN CONTROL VALVE (MCV) - ALPHA/BETA

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	601619	COVER, Inlet (Before s/n Alpha 4174, Beta 4190)	1
	605266	COVER, Inlet (After s/n Alpha 4173, Beta 4189)	1
2	17664	PLUG, SAE 20	AR
3	601714	KIT, Tie Rod, 2 Sections	1
	940092	KIT, Tie Rod, 3 Sections	1
	601725	KIT, Tie Rod, 4 Sections	1
4	16115	FITTING, Inlet	1
	5644-1616	ADAPTER, With Tipper Valve (Not shown)	1
5	940047	SCREW (Accessory Section)	4
6	940035	BONNET (Accessory Section)	1
	601620	KIT, Spool Positioner (Accessory Section)	1
7	601625	KIT, Spool Seal (Packer and Carrier Section)	AR
	601621	KIT, Spool Seal (Accessory Section)	AR
8	601643	VALVE SECTION, Accessory	AR
	601627	KIT, Seal (Accessory Section)	AR
9	601645	VALVE SECTION, Packer	1
	601626	KIT, Seal (Packer Section)	1
	601591	KIT, Spool (Includes KO Positioner and Seals)	1
10	605247	CARTRIDGE, Relief 3500 PSI	1
	940065	KIT, Seal, Relief Cartridge	1
	940064	PLUG, Non Relief	AR
11	601736	KIT, Seal, Between Sections	AR
12	601642	VALVE SECTION, Carrier	1
	601626	KIT, Seal (Carrier Section)	1
	601591-01	KIT, Spool (Includes KO Positioner and Seals)	1
13	940040	PLUG, Load Check	AR
14	940090	SCREW	4
15	106491	CAP, KO Positioner Adjustment Access	2
16	601623	KNOCKOUT POSITIONER	2
	601624	KIT, Seal, Knockout Positioner	2
17	102997	KIT, Detent Spring (Includes Steel Balls)	1
18	601622	BOOT, Dust	AR
19	940070	COVER, Outlet (Before s/n 4174)	1
	605265	COVER, Outlet (After s/n 4173)	1
20	16226	ELBOW	1
	601327-04	VALVE, Complete, 2 Section, Alpha Before s/n 4174	1
	601327-30	VALVE, Complete, 2 Section, Alpha After s/n 4173	1
	601327-05	VALVE, Complete, 3 Section, Alpha Before s/n 4174	1
	601327-31	VALVE, Complete, 3 Section, Alpha After s/n 4173	1
	601327-06	VALVE, Complete, 4 Section, Alpha Before s/n 4174	1
	601327-32	VALVE, Complete, 4 Section, Alpha After s/n 4173	1
	601327-01	VALVE, Complete, 2 Section, Beta Before s/n 4190	1
	601327-33	VALVE, Complete, 2 Section, Beta After s/n 4189	1
	601327-02	VALVE, Complete, 3 Section, Beta Before s/n 4190	1
	601327-34	VALVE, Complete, 3 Section, Beta After s/n 4189	1
	601327-03	VALVE, Complete, 4 Section, Beta Before s/n 4190	1
	601327-35	VALVE, Complete, 4 Section, Beta After s/n 4189	1

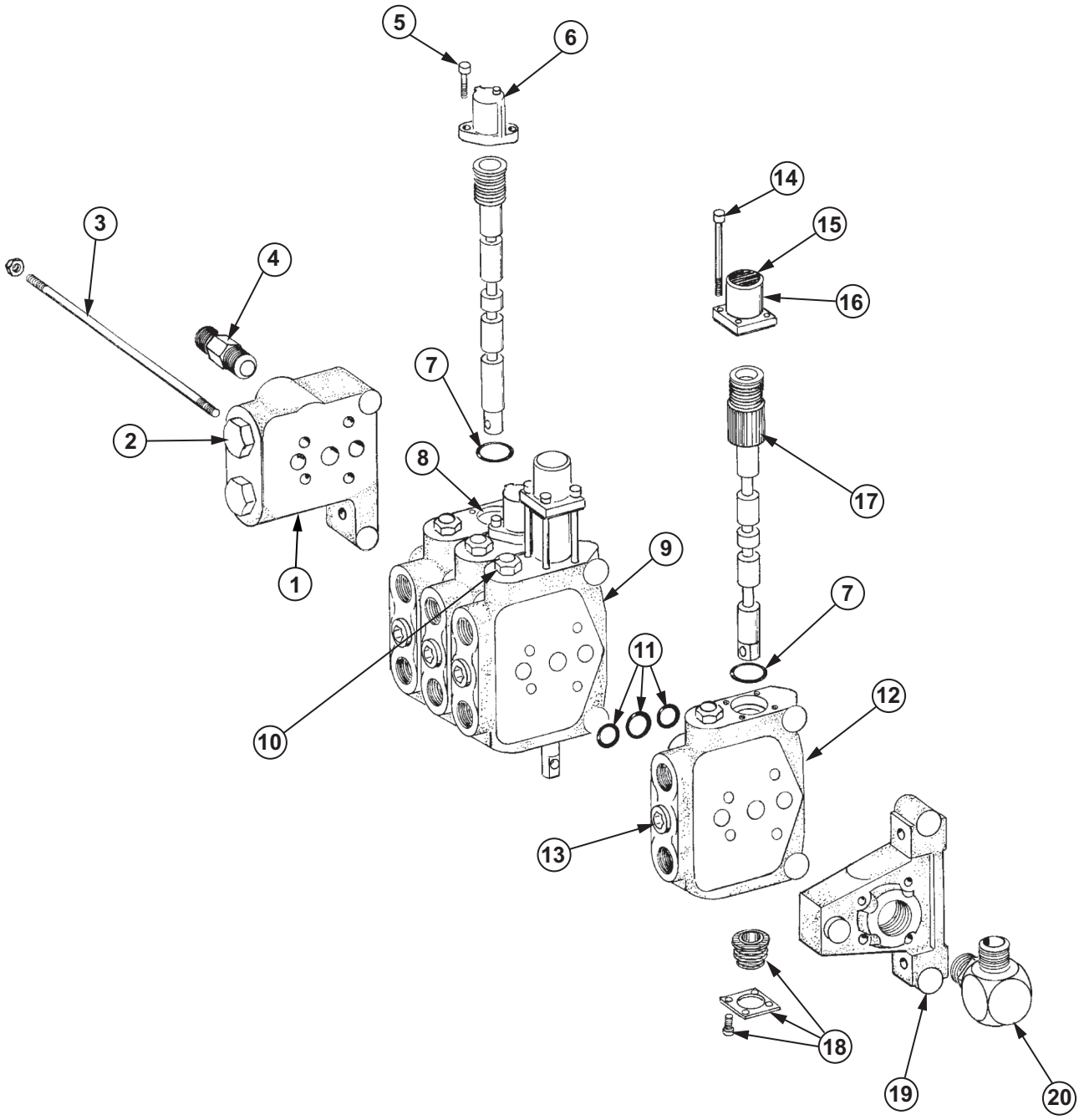
MAIN CONTROL VALVE (MCV) – DELTA Before S/N 5053



REF. NO	PART NO.	DESCRIPTION	QTY.
1	601667	COVER, Inlet	1
2	601086	VALVE SECTION, Accessory	1
3	601087	VALVE SECTION, Packer	1
4	601088	VALVE SECTION, Carrier	1
5	601089	COVER, Outlet	1
6	601090	SEAL KIT, Complete (Accessory Section)	1
	601091	SEAL KIT, Complete (Packer or Carrier Section)	1
7	601092	LOAD CHECK, Accessory	1
8	601093	LOAD CHECK, Packer or Carrier	1
9	601094	RELIEF, Packer, 3500 PSI	1
10	601095	POSITIONER, Accessory	1
11	601096	BONNET, Accessory	1
12	601097	KNOCKOUT POSITIONER, Packer	1
13	601098	KNOCKOUT POSITIONER, Carrier	1
14	601099	BONNET, Packer or Carrier	1
15	601100	SEAL KIT (Between Section or Cover)	5
16	601101	STUD KIT	1
17	601102	BOOT KIT (Not Shown)	1
18	601672	SEAL KIT (Knockout Positioner) (Not Shown)	
	406752-01	VALVE, MCV, 2 Sections (Packer and Carrier)	1
	406752-02	VALVE, MCV, 3 Sections (Packer, Carrier and 1 Accessory)	1
	406752-03	VALVE, MCV, 4 Sections (Packer, Carrier and 2 Accessories)	1

MAIN CONTROL VALVE (MCV) - DELTA After

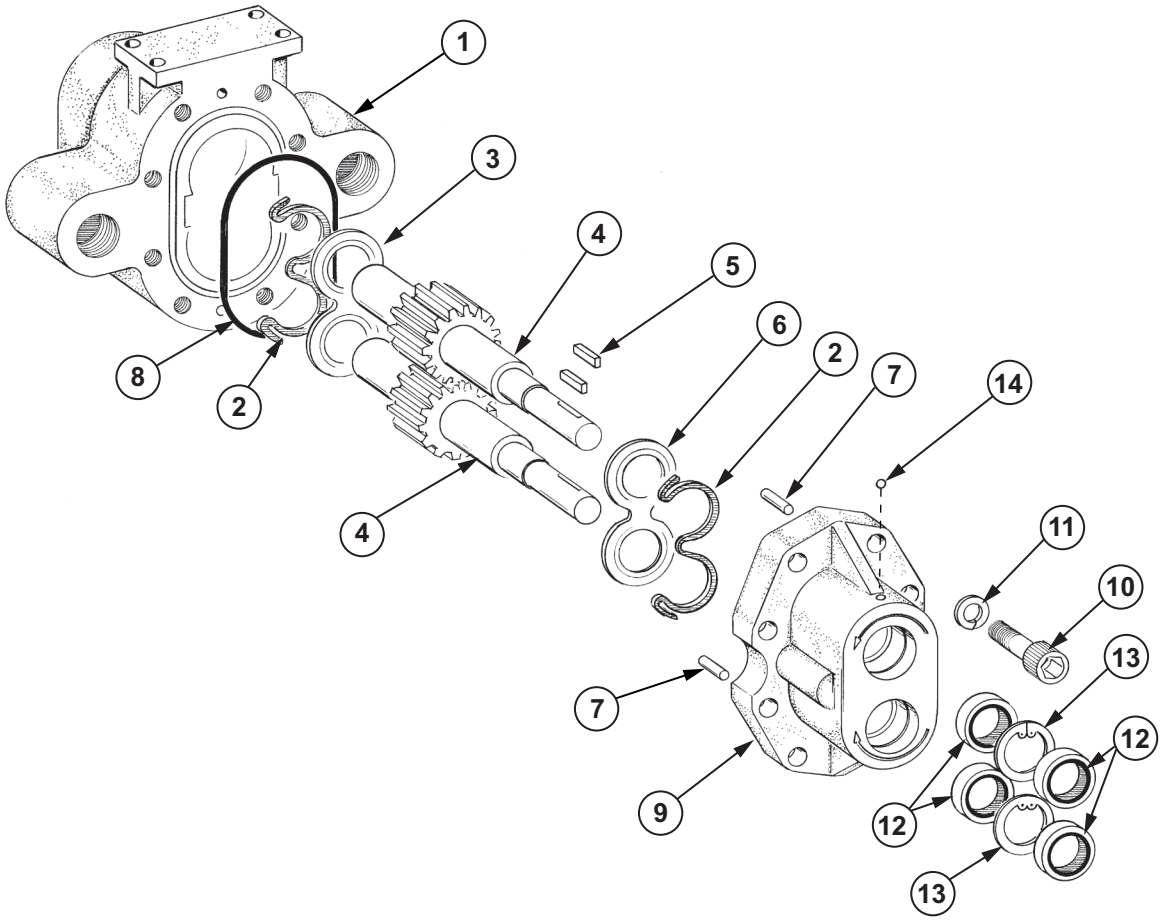
s/n 5052



MAIN CONTROL VALVE (MCV) - DELTA After s/n 5052

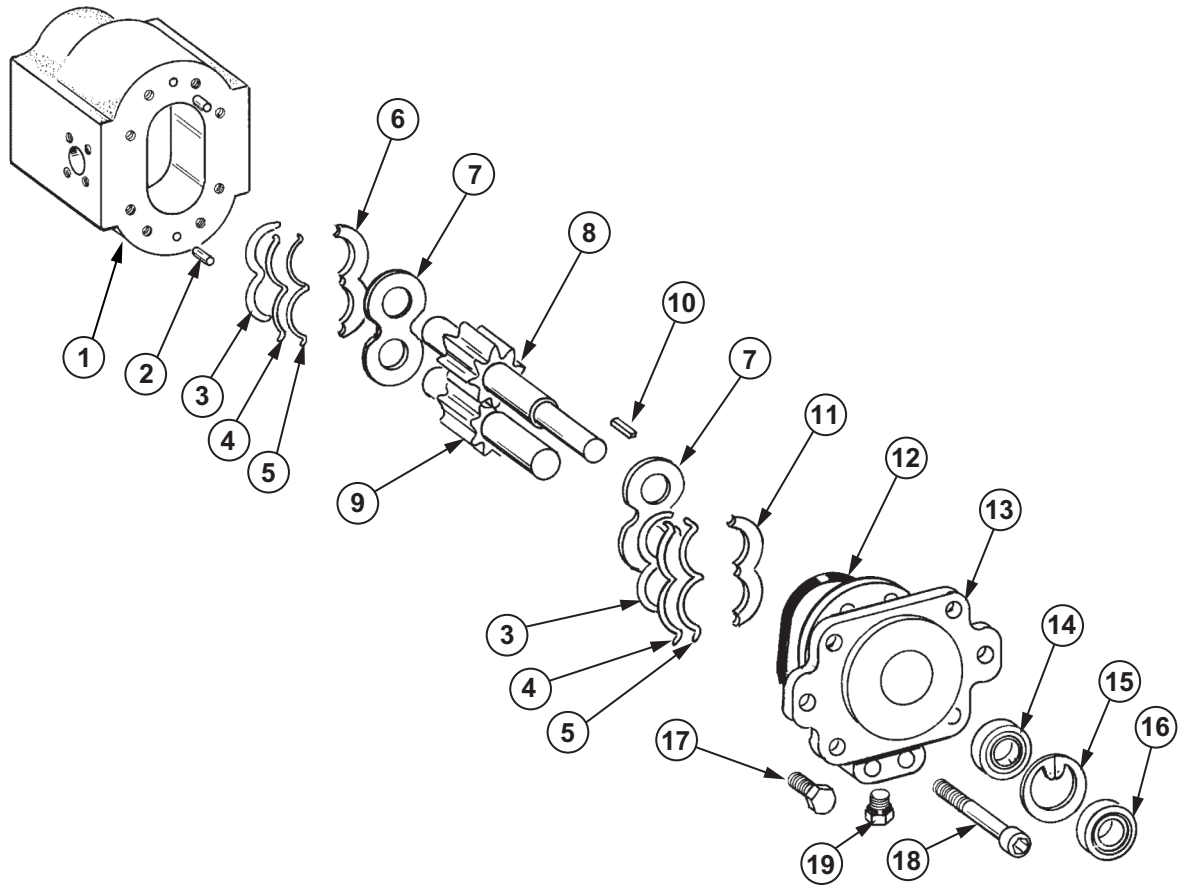
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	605266	COVER, Inlet	1
2	17664	PLUG, SAE 20	AR
3	601714	KIT, Tie Rod, 2 Sections	1
	940092	KIT, Tie Rod, 3 Sections	1
	601725	KIT, Tie Rod, 4 Sections	1
4	16115	FITTING, Inlet	1
	5644-1616	ADAPTER, With Tipper Valve (Not shown)	1
5	940047	SCREW (Accessory Section)	4
6	940035	BONNET (Accessory Section)	1
	601620	KIT, Spool Positioner (Accessory Section)	1
7	601625	KIT, Spool Seal (Packer and Carrier Section)	AR
	601621	KIT, Spool Seal (Accessory Section)	AR
8	601643	VALVE SECTION, Accessory	AR
	601627	KIT, Seal (Accessory Section)	AR
9	601645	VALVE SECTION, Packer	1
	601626	KIT, Seal (Packer Section)	1
	601591	KIT, Spool (Includes KO Positioner and Seals)	1
10	605247	CARTRIDGE, Relief 3500 PSI	1
	940065	KIT, Seal, Relief Cartridge	1
	940064	PLUG, Non Relief	AR
11	601736	KIT, Seal, Between Sections	AR
12	601642	VALVE SECTION, Carrier	1
	601626	KIT, Seal (Carrier Section)	1
	601591	KIT, Spool (Includes KO Positioner and Seals)	1
13	940040	PLUG, Load Check	AR
14	940090	SCREW	4
15	106491	CAP, KO Positioner Adjustment Access	2
16	601623	KNOCKOUT POSITIONER	2
	601624	KIT, Seal, Knockout Positioner	2
17	102997	KIT, Detent Spring (Includes Steel Balls)	1
18	601622	BOOT, Dust	AR
19	605265	COVER, Outlet (After s/n Alpha 4173, Beta 4189)	1
20	16226	ELBOW	1
	601327-30	VALVE, Complete, 2 Section	1
	601327-31	VALVE, Complete, 3 Section	1
	601327-32	VALVE, Complete, 4 Section	1

LEACH PUMP, 307451-01



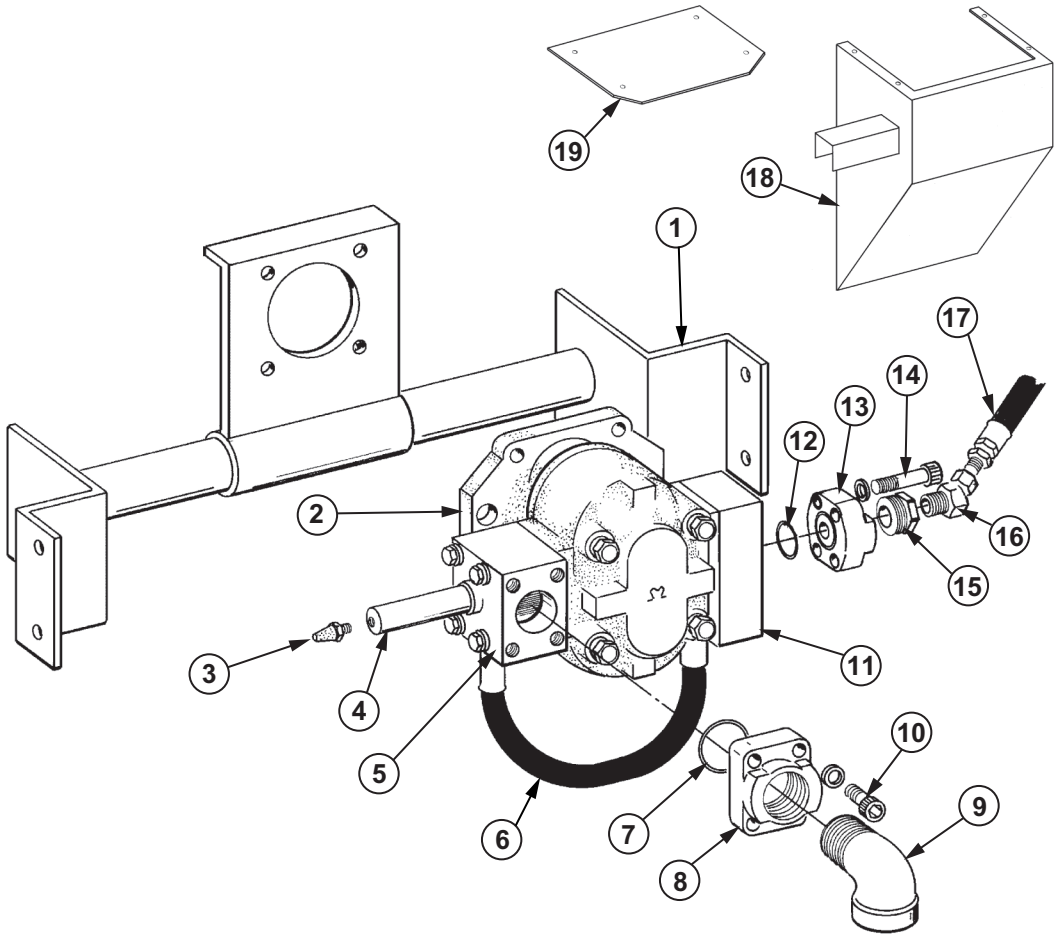
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	N/A	HOUSING, Rear	1
2	108988	BALANCE, Pressure	2
3	108986	PLATE, Pressure	1
4	108984	GEAR	2
5	103096	KEY	2
6	108987	PLATE, Pressure	1
7	108989	DOWEL	2
8	108993	O-RING	1
9	108983	HOUSING, Front	1
10	108992	CAPSCREW	8
11	108991	WASHER	8
12	108990	SEAL	4
13	108996	RING, Snap	2
14	108995	BALL, Steel	1
	307451-01	ASSEMBLY, Pump	1
	900033	KIT, Repair (Includes Items 2, 8, 12 and 13)	1

LEACH FRONT MOUNTED PUMP, 204071



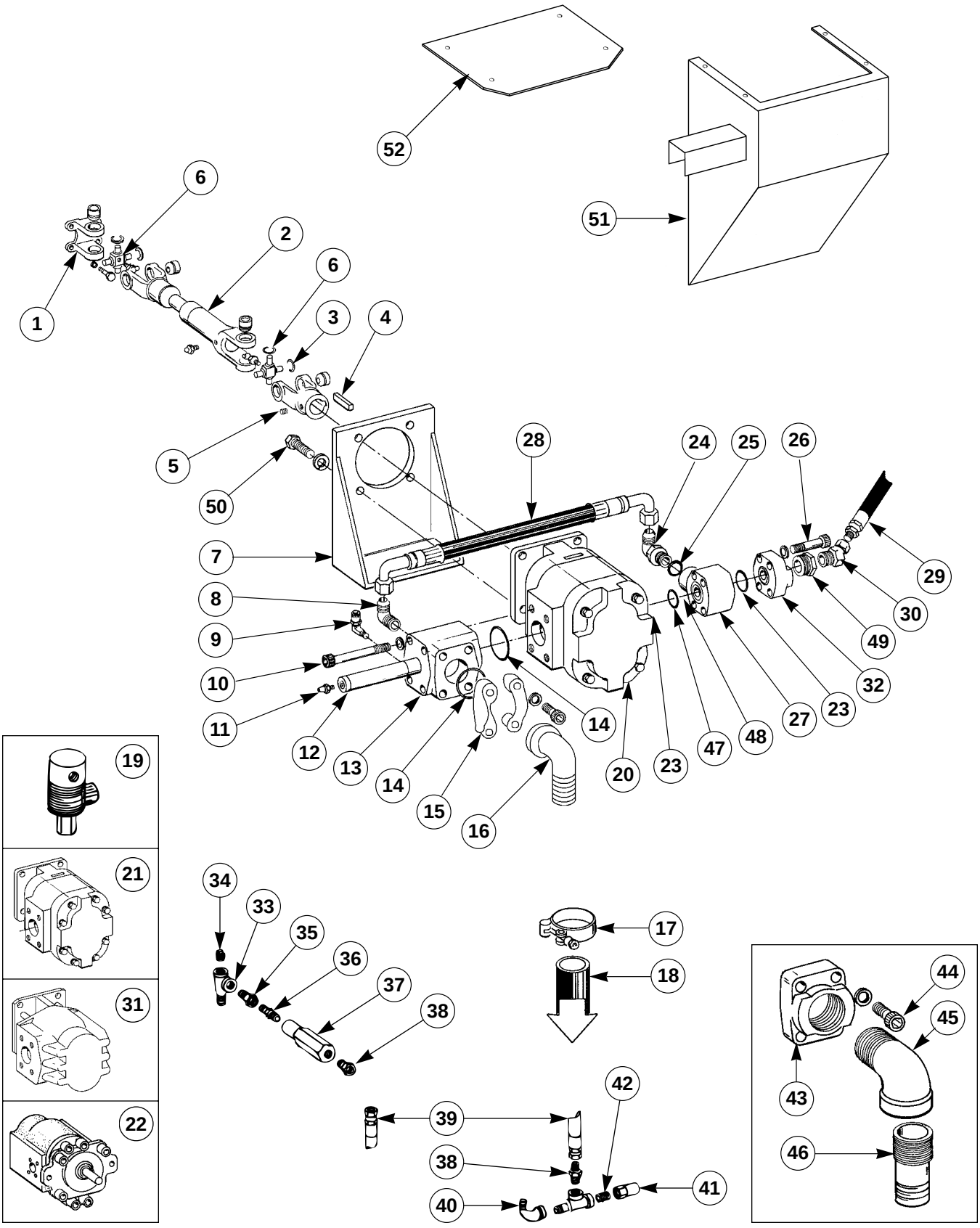
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	N/A	BODY, Not Sold Separately	1
2	103090	DOWEL	2
3	104237	RING, Retainer	2
4	104238	O-RING	2
5	104239	RING, Backup	2
6	104240	PLATE, Isolation	1
7	104241	PLATE, Pressure	2
8	104242	GEAR, Drive	1
9	104243	GEAR, Idler	1
10	104244	KEY	1
11	104245	PLATE, Isolation, Top	1
12	103099	FLANGE, Seal	1
13	104246	FLANGE	1
14	103102	SEAL	1
15	103103	RING, Snap	1
16	103104	SEAL, Outer	1
17	104247	SCREW, Cap	2
	104248	WASHER, Lock	8
18	104249	SCREW, Cap	6
19	104250	PLUG	1
	204071	PUMP, Front Mounted, Complete	1

FRONT PUMP (MUNCIE)



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	38150	WELDMENT, Pump Support (Mack MR)	1
2	103075	PUMP, Muncie, Counter-Clockwise	1
3	39996	MUFFLER	1
4	103076	CYLINDER, Air	1
5	103077	VALVE, Dry	1
6	41058	KIT, Dry Valve (Includes Items 5-6)	1
7	39614	O-RING	1
8	37193	ADAPTER, 2"	1
9	@0031	ELBOW, 2"	1
10	F1035	SCREW, Cap. 1/2" X 2" UNC	4
	F8000	WASHER, Lock, 1/2"	4
11	103078	VALVE, Flow Regulator	1
12	16927	O-RING	1
13	37192	ADAPTER, 1 1/4"	1
14	F5975	SCREW, Cap, Socket Head, 7/16" X 4" UNC	4
15	15697	CONNECTOR	1
16	17407	FITTING, Swivel	1
17	P-20-257	HOSE	1
18	301867	WELDMENT, Pump Guard	1
19	202836	COVER, Pump Guard	1
	104588	ASSEMBLY, Pump (Includes Items 2-7)	1

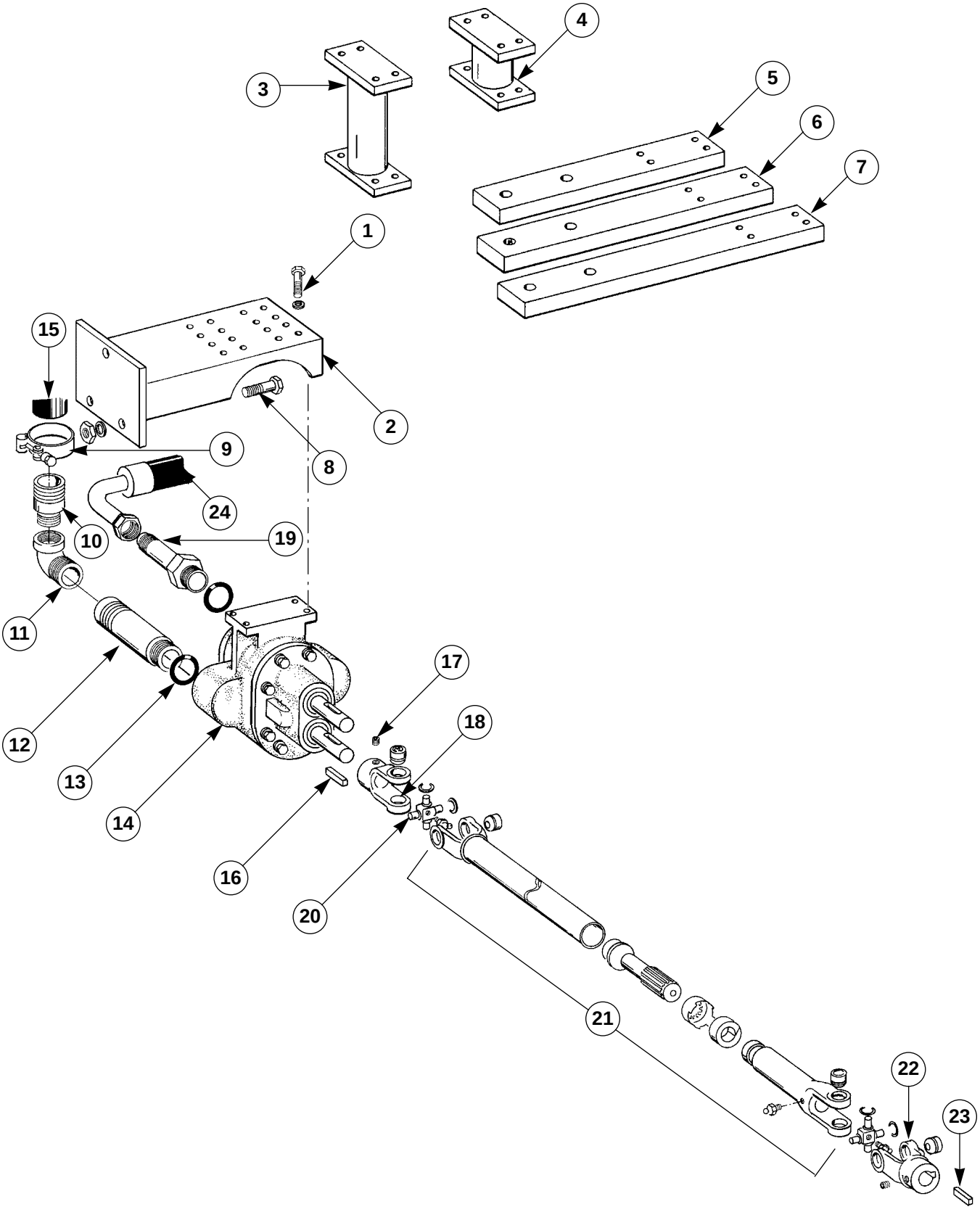
PUMP, DRY VALVE, TYPICAL



PUMP, DRY VALVE, TYPICAL

REF. NO	PART NO.	DESCRIPTION	QTY.
1	100004	FLANGE Yoke, 2¾" Pilot, 7/16" Capscrews	1
	100003	FLANGE Yoke, 2⅜" Pilot, ⅜" Capscrews	1
2	36717	SHAFT, Drive	As Req.
3	100002	END, Yoke	1
	300108	ASSEMBLY, Drive Shaft (⅜" Bolts)	1
	300109	ASSEMBLY, Drive Shaft (7/16" Bolts)	1
4	@0139	KEY, 5/16"	1
5	F4725	SCREW, Set, Socket Head, ⅜" x ⅜" UNC	1
6	100210	JOURNAL and Bearing Kit	2
	F7975	WASHER, Lock, ½"	4
7	18400	BRACKET, Pump Mounting, Typical	As Req.
8	1356	ELBOW	1
9	100046	ELBOW, Tubing Connector	1
10	F1250	SCREW, Cap, ½" x 4" UNC	4
11	39996	MUFFLER	1
12	25952	CYLINDER, Dry Valve, Air	1
13	35753	VALVE, Dry (Includes Item 12)	1
14	39614	O-RING, Dry Valve Flange	2
15	101240	KIT, Flange	1
16	101242	ELBOW, Flange	1
17	16249	CLAMP, Hose	1
18	@0132	HOSE, 2" Suction	As Req.
19	105631	VALVE, Air Solenoid (N.O.)	1
20	102400	PUMP, Commercial, Counter-Clockwise	1
21	40666	PUMP, Commercial, Counter-Clockwise	1
22	204071	PUMP, Leach, Counter-Clockwise, Rotation	1
23	16927	O-RING, Pump To Flow Regulator	2
24	31291	ELBOW	1
25	N/A	O-RING, Elbow, (Included With Item 24)	
26	F5975	SCREW, Cap, Socket Head, 7/16" x 4" UNC	4
27	38148	VALVE, Flow, Regulator	1
28	35755	HOSE, Dry Valve	1
	41058	KIT, Dry Valve Assembly, (Includes Items 8, 10, 13 & 24-28)	
29	P-20-257	HOSE	1
30	17407	FITTING, Swivel	1
31	37108	PUMP, Tyrone (optional)	1
	37061	PUMP, Tyrone, (includes Dry Valve Kit 41058)	1
32	37192	ADAPTER, 1¼"	1
33	102568	TEE Street, If Winch Installed	1
34	@0208	PLUG, Pipe Square Head, ½" (If Winch Installed)	1
35	@0183	ADAPTER, ⅜" To ½" (If Winch Installed)	1
36	41921	NIPPLE, Close ⅜" (If Winch Installed)	1
37	100211	VALVE, Flow Control (If Winch Installed)	1
38	103563	CONNECTOR (If Winch Installed)	2
39	103564	HOSE, Assembly (If Winch Installed)	1
40	204565	ELBOW 90° Tapped	1
41	100369	NIPPLE, Test	
42	102126	NIPPLE	
43	37193	ADAPTER, 2"	1
44	F1035	SCREW, Cap, ½" x 2" UNC	4
	F8000	WASHER, Lock, Hi-Collar ½"	8
45	@0031	ELBOW, Street 2" Pipe	1
46	SR-8580	ADAPTER	1
47	106569	SNAP, Ring	1
48	106570	SPRING	1
49	15697	CONNECTOR	1
50	F4725	SCREW, Set, Socket Head, ⅜" x ⅜" UNC	4
	F1035	SCREW, Cap, ½" x 2" UNC	4
51	301867	WELDMENT, Pump Guard	1
52	202836	COVER, Pump Guard	1

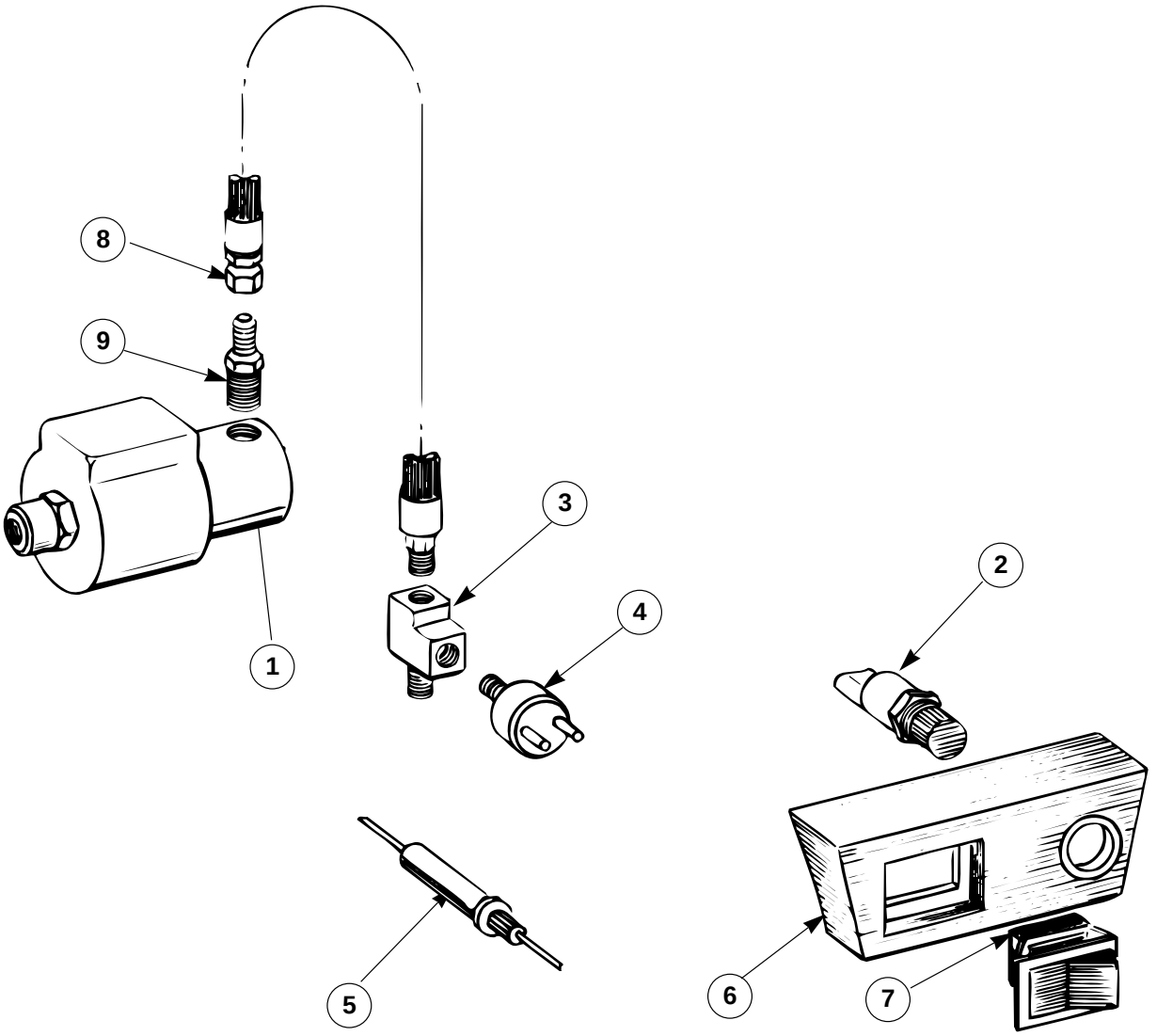
LEACH PUMP MOUNTING



LEACH PUMP MOUNTING

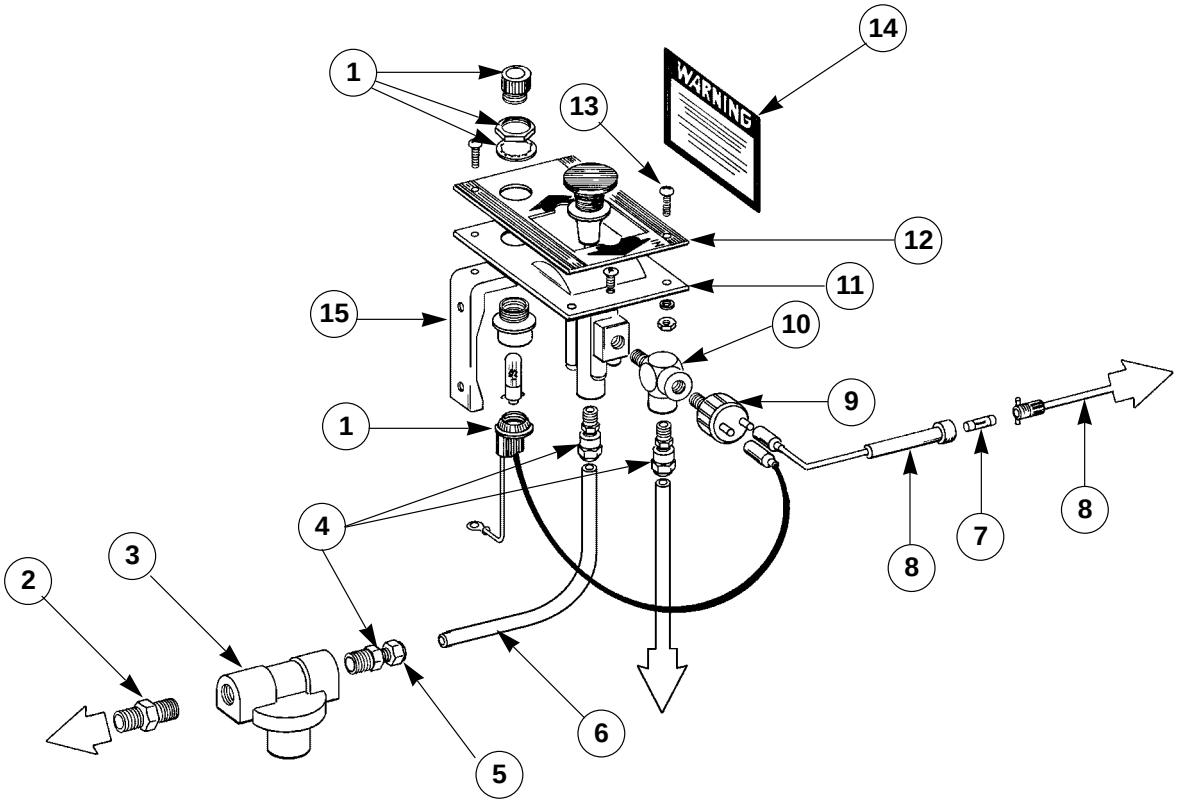
REF. NO	PART NO.	DESCRIPTION	QTY.
1	F0979	SCREW, Cap ½" x 1½" UNC	4
	F7975	WASHER, Lock, ½"	4
2	302651	BRACKET, Pump	1
3	SK-2081	BRACKET, Pump	1
4	P-16-1147	BRACKET, Pump	1
5	P-16-470-1	BRACKET, Pump, 15"	1
6	41284	BRACKET, Pump, 18"	1
7	P-16-470-2	BRACKET, Pump, 20"	1
8	F1500	SCREW, Cap, ⅝" x 2¾" UNC	3
	F8050	WASHER, Lock, ⅝"	3
	F3475	NUT, Lock, ⅝" UNC	3
9	16249	CLAMP	1
10	PO-591	ADAPTER	1
11	@0018	ELBOW, Street, 1¼"	1
12	P-16-1114	ADAPTER	2
13	16101	O-RING	2
14	307451-01	PUMP	1
15	17883	HOSE	1
16	1218	KEY	2
17	F4725	SCREW, Set ⅜" x ⅜" UNC Socket Head	2
18	100879	YOKE	1
19	100404	ADAPTER	1
20	100878	JOURNAL and Bearing Kit	2
21	100903	SHAFT	1
22	100902	YOKE	1
	P-16-798	ASSEMBLY, (includes Items 18-19 & 21-23)	
23	@0139	KEY, 5⁄16"	1
24	100377	HOSE	1
25	17407	FITTING, Swivel (Not Shown)	

HOTSHIFT PTO CONTROLS



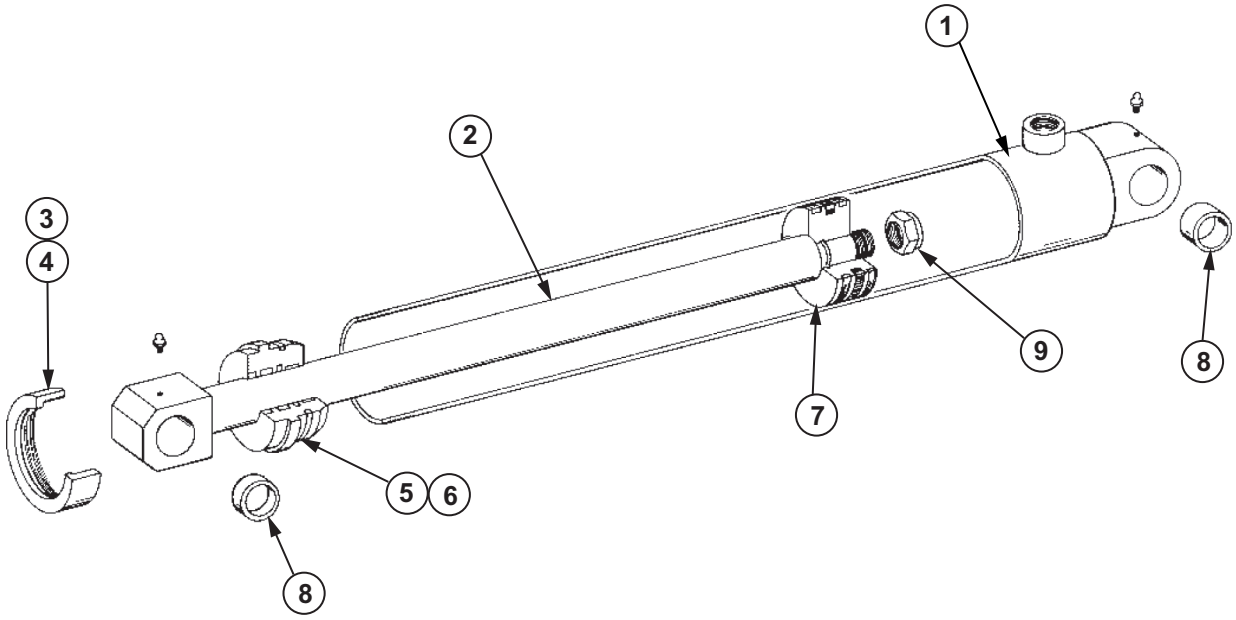
REF. NO	PART NO.	DESCRIPTION	QTY.
1	379193-1	VALVE, Solenoid, (12 Volt Low Pressure)	1
2	328751X	LIGHT, Indicator, (12 Volt)	1
3	NSS	TEE, Street	1
4	100184	SWITCH, Pressure	1
	NSS	TERMINAL, Wire	2
5	35865	FUSE HOLDER (9 Amp)	1
6	NSS	PLATE, Face	1
	NSS	BRACKET, Support	1
7	378881	SWITCH, Rocker	1
8	101176	HOSE	1
9	NSS	FITTING, Screen Adapter	1
	328715X	12 Volt Shift Installation Kit (Includes Items 1-9) Without Speed Limiter (Low Pressure For Allison)	1
		NSS = Not Sold Separately	

PTO CONTROLS, AIR 100920



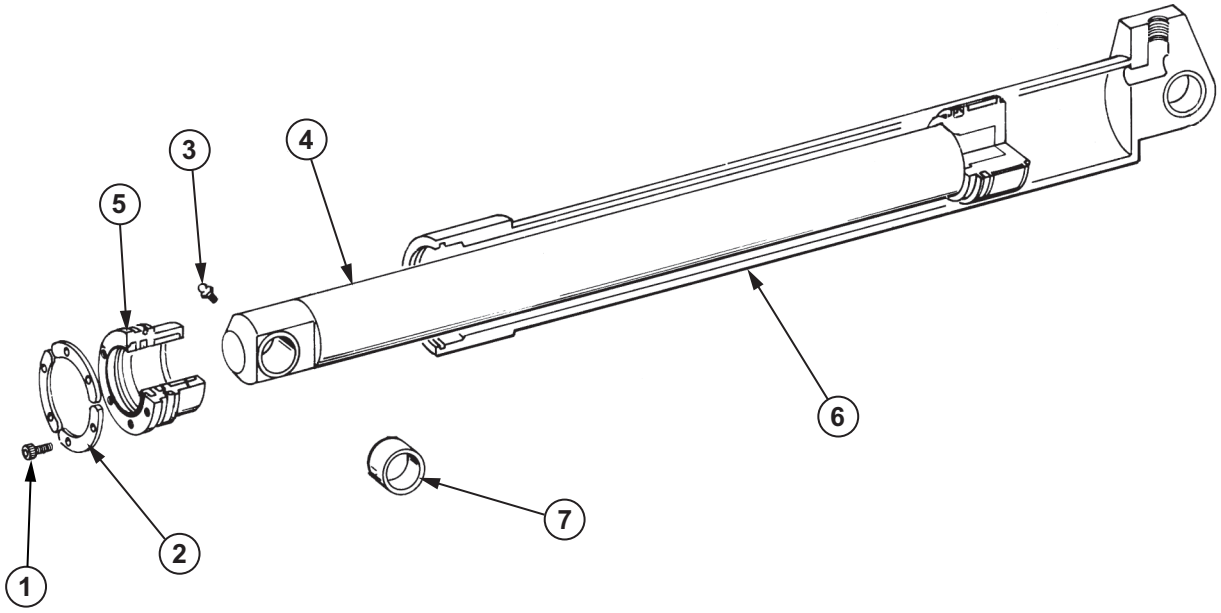
REF. NO	PART NO.	DESCRIPTION	QTY.
1	31651	LIGHT, Indicator	1
2	36860	CONNECTOR	1
3	30138	VALVE, Pressure Protection	1
4	39218	CONNECTOR, Male, ⅛"	3
5	36862	NUT, Tube	1
6		TUBING, Nylon, 30" x ⅛"	1
7	40756	FUSE	1
8	35865	HOLDER, Fuse	1
9	38778	SWITCH, Pressure	1
10	@0159	TEE, ⅛", Street	1
11	37880	VALVE, Air Control	1
12	37878	PLATE, Control, Mounting	1
13	N/A	SCREW, Slotted, ⅛" SAE	4
	N/A	WASHER, Lock, ⅛" SAE	4
	N/A	NUT, ⅛" SAE	4
14	35210	DECAL, Warning	1
15	N/A	BRACKET, Air Control	1

PACKER CYLINDER 210658 - ALPHA



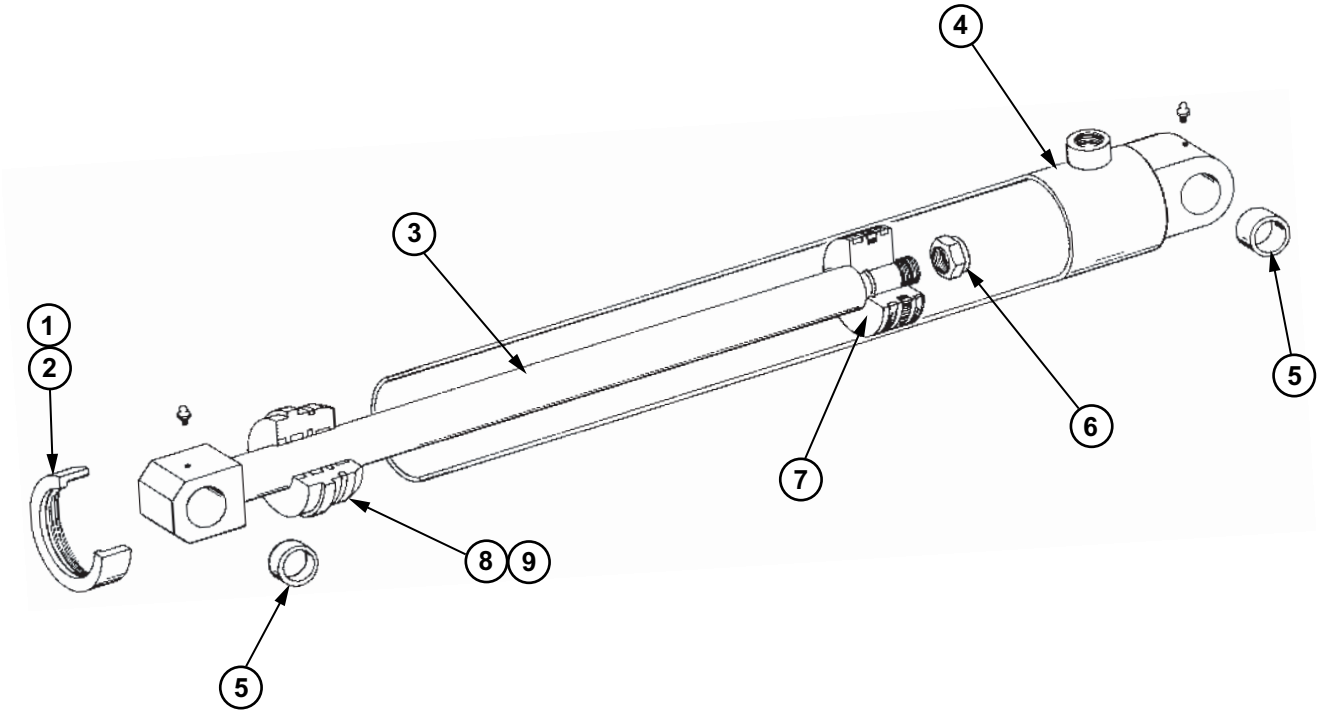
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	108857	BARREL	1
2	108858	ROD	1
3	108860	RETAINER, Gland	1
4	F4725	SET SCREW, Gland Retainer	1
5	108859	GLAND	1
6	108854	RETAINING RING, Internal	1
7	108860	PISTON	1
8	108855	BUSHING	2
9	F4079	NUT, Nylock, 1 1/2" UNC	1
	108862	KIT, Seal	1
	210658	ASSEMBLY, Cylinder	1

PACKER CYLINDER 406578 - BETA



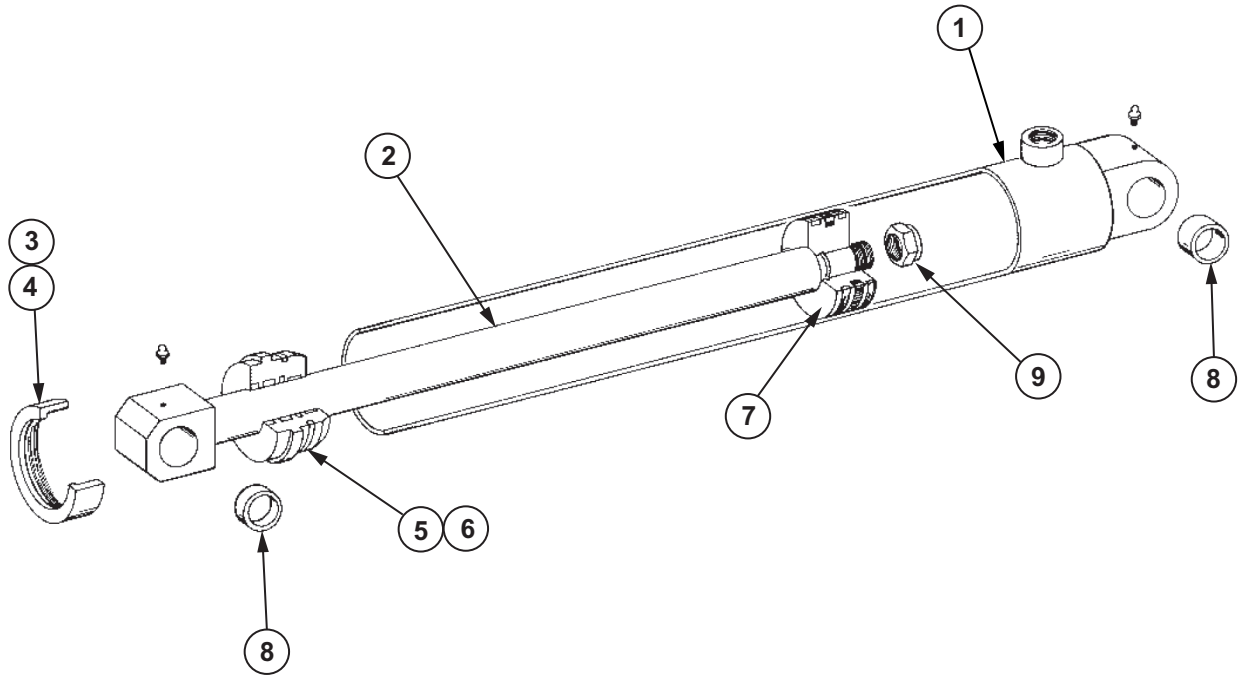
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	F5625	SOCKET, Head Capscrew, 3/8" x 3/4" UNC	6
2	30375	SEGMENT, Lock	3
3	16170	FITTING, Grease	2
4	404410	ROD, Piston Weldment	1
5	304439	HEAD, Gland	1
6	303107	CASE Weldment, Packer Cylinder	1
7	101341	BEARING	4
	406578	PACKER, Cylinder Assembly	
	109203	REPAIR KIT	

PACKER CYLINDER 601366 - DELTA



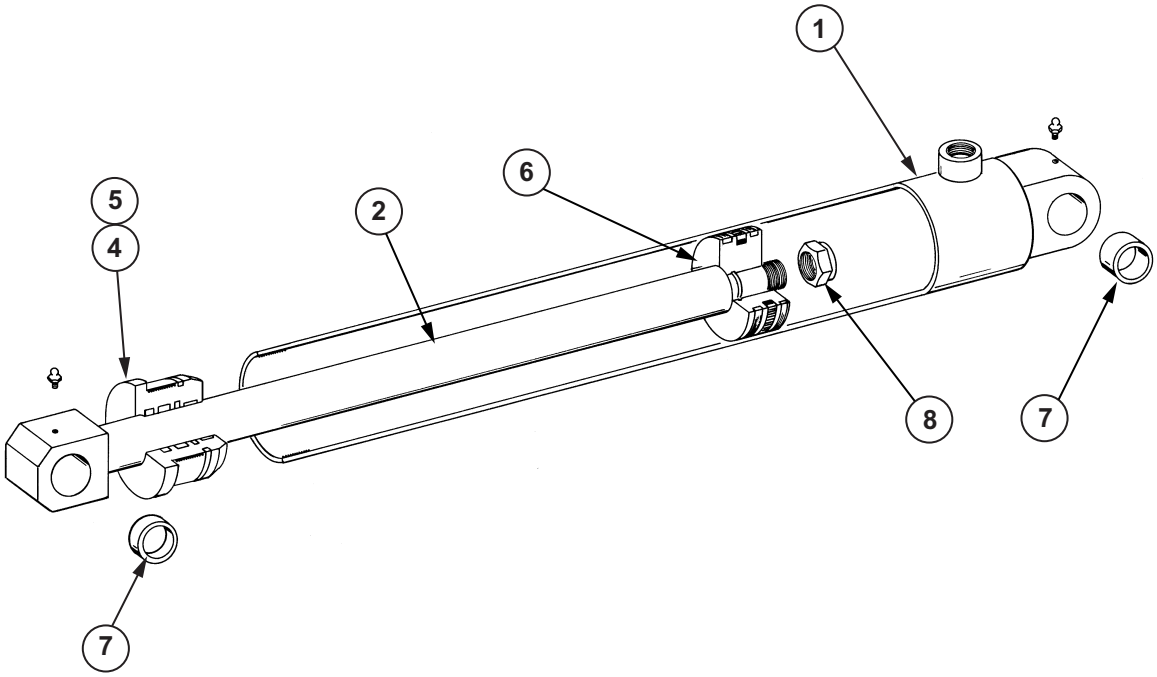
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	109109	GLAND, Retainer	1
2	F4725	SCREW, Set	1
3	108858	ROD	1
4	109106	BARREL	1
5	108855	BUSHING	2
6	F4079	NUT, Nylock, 1 1/2” UNC	1
	41876	WASHER	2
7	NSS	PISTON	1
8	NSS	GLAND	1
9	108854	RING, Internal Retaining	1
	950044	KIT, Seal	1
	601366	CYLINDER, Assembly	2

CARRIER CYLINDER 210659 - ALPHA/BETA



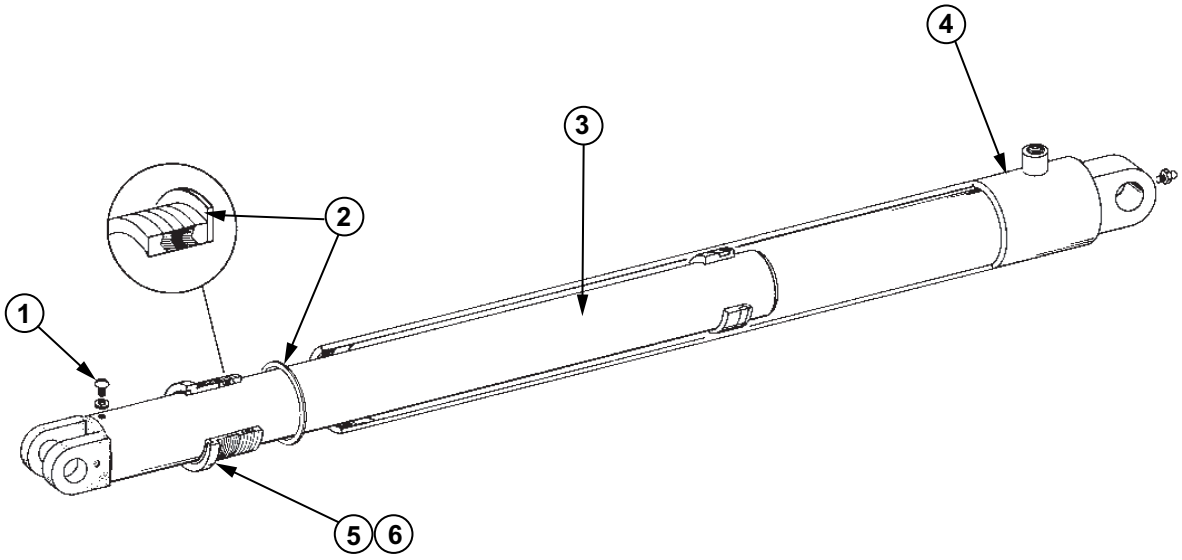
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	108849	BARREL	1
2	108850	ROD	1
3	108853	RETAINER, Gland	1
4	F4725	SET SCREW, Gland Retainer	1
5	108851	GLAND	1
6	108854	RETAINING RING, Internal	1
7	108852	PISTON	1
8	108855	BUSHING	2
9	F4079	NUT, Nylock, 1 1/2" UNC	1
	108856	KIT, Seal	1
	210659	ASSEMBLY, Cylinder	

CARRIER CYLINDER 210628 - DELTA



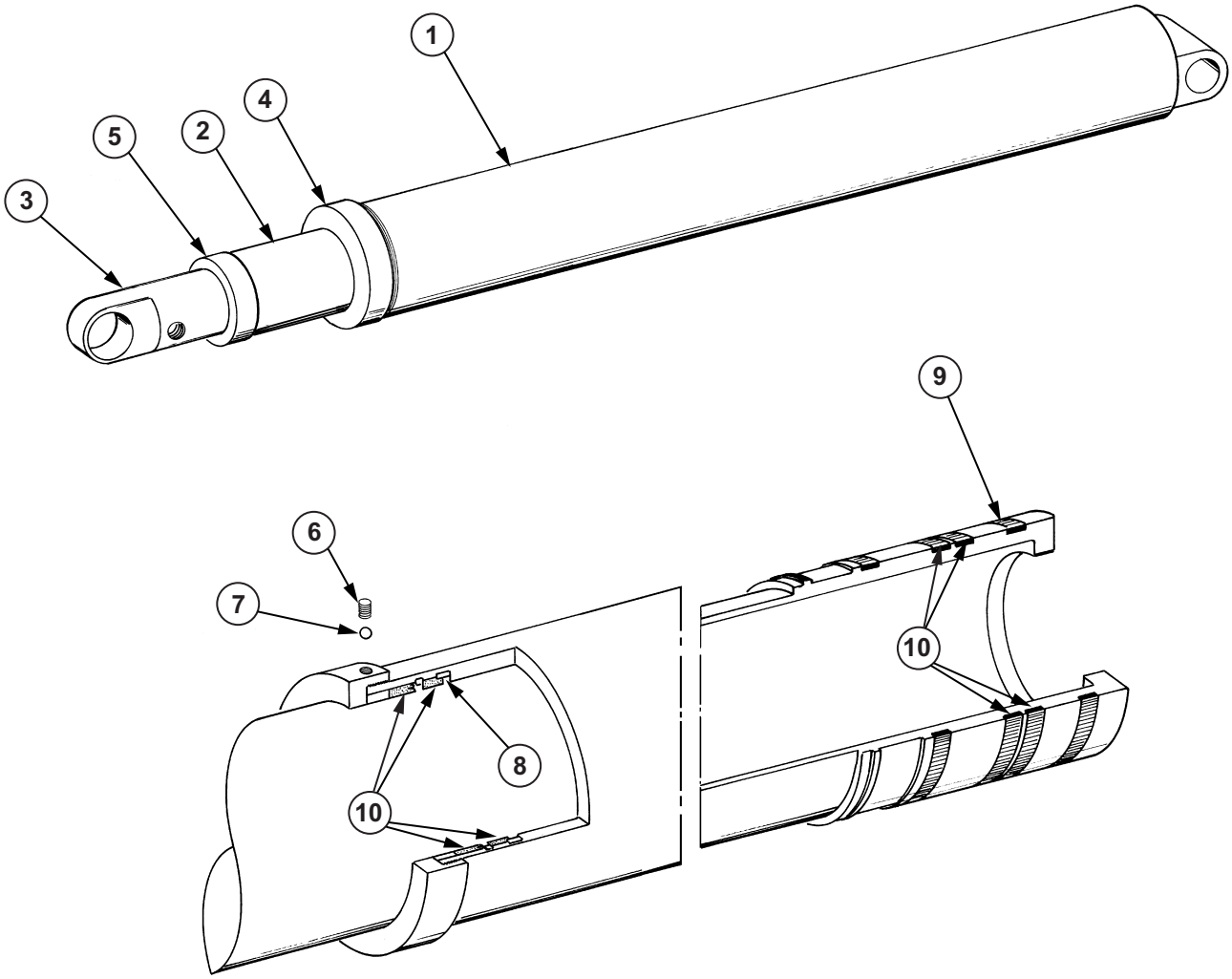
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	109124	BARREL	1
2	109125	ROD	1
3	108970	SET SCREW, Gland Retainer (Not Shown)	1
4	109126	GLAND	1
5	108955	RETAINING RING, Internal	1
6	109127	PISTON	1
7	108855	BUSHING	2
8	F4079	NUT, Nylock, 1 1/2" UNC	1
	109130	KIT, Seal	1
	210628	ASSEMBLY, Cylinder	1

TAILGATE LIFT CYLINDER



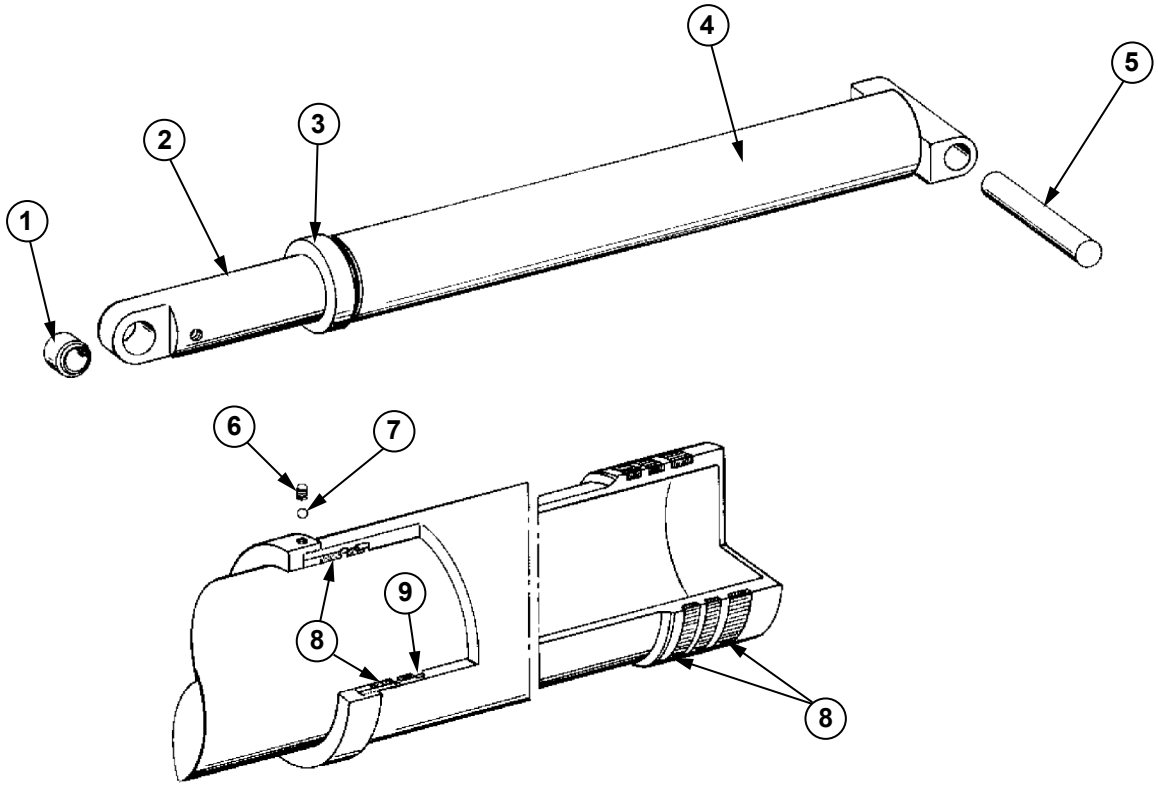
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	922034	KIT, Bleeder and Gasket	1
2	108969	RETAINING RING, Internal	1
3	108844	PLUNGER	1
4	108843	BARREL (Before Alpha/Beta s/n 4753, Delta s/n 5094)	1
	701508	BARREL (After Alpha/Beta s/n 4752, Delta s/n 5093)	1
5	108845	GLAND	1
6	108970	SET SCREW	1
	108842	KIT, Seal	1
	108848	TOOL, Feeder (Not Shown)	1
	210629	CYLINDER, Assembly (Before Alpha/Beta s/n 4753 Delta s/n 5094	2
	701479	CYLINDER, Assembly (After Alpha/Beta s/n 4752 Delta s/n 5093	2

TELESCOPING CYLINDER 210630-05 - 25 YARD



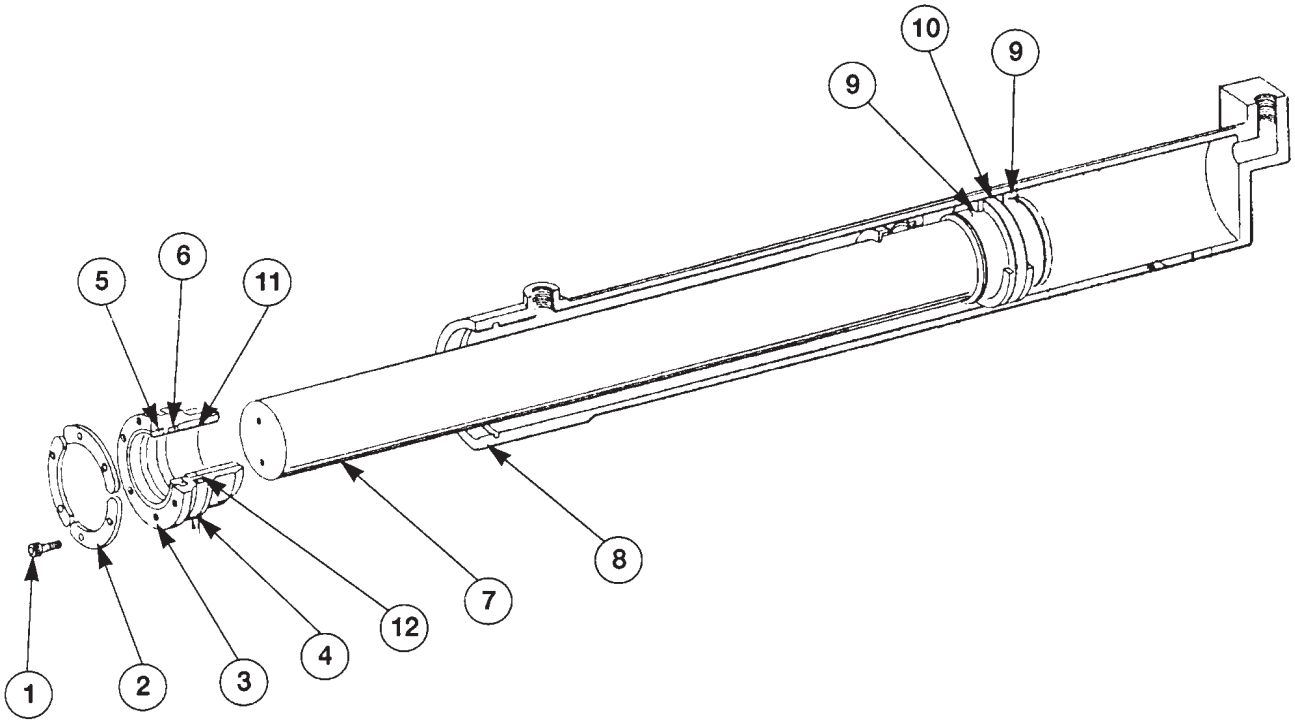
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	109099	BARREL ASSEMBLY	1
2	109100	SLEEVE ASSEMBLY	1
3	109101	ROD ASSEMBLY	1
4	108865	RETAINER, GLAND	1
5	109102	RETAINER, GLAND	1
6	100500	SCREW, SET	2
7	100503	SLUG, NYLON	2
8	100496	RETAINING RING NUT, INT. 4"	1
	109103	RETAINING RING NUT, INT. 5"	1
9	108870	WEAR RING, 5"	1
	100494	WEAR RING, 4"	1
10	109104	SEAL KIT	1
	201630-05	CYLINDER	1

PUSHOUT CYLINDER - 14, 16, 18, 20 YARD



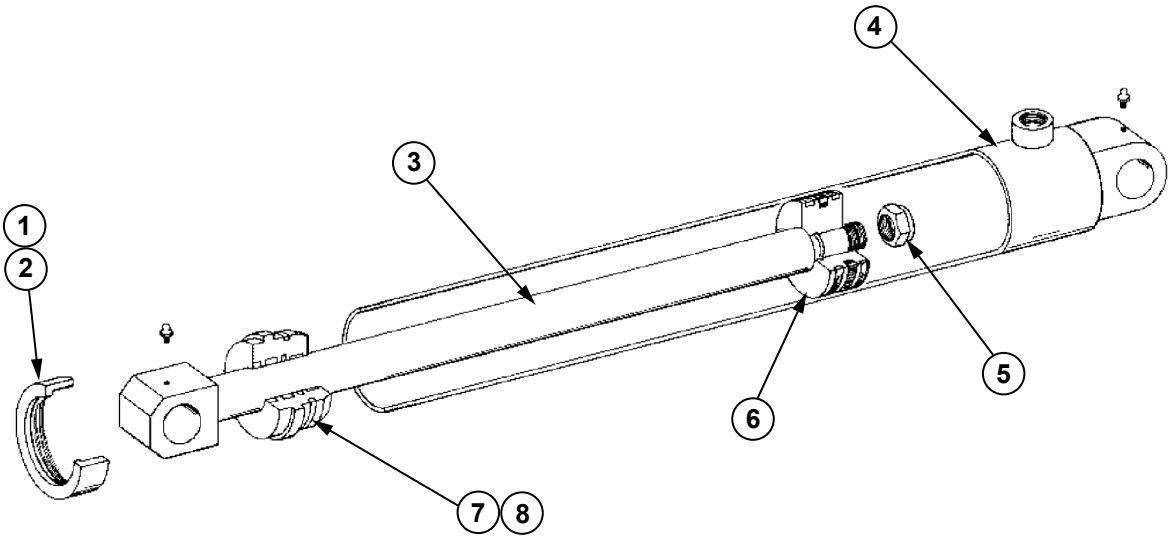
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	108874	BEARING, Spherical	1
2	108864	PLUNGER, 14, 16, 18, 20 Yard	1
3	108865	GLAND, Retainer	1
4	NSS	BARREL, 14 Yard	1
	NSS	BARREL, 16 Yard	1
	NSS	BARREL, 18 Yard	1
	108863	BARREL, 20 Yard	1
5	210663	PIN, Cylinder Pivot	1
6	108866	SCREW, Set	1
7	108867	SLUG, Nylon	1
8	950057	KIT, Seal	1
9	108868	RETAINING RING, Internal	1
	210630-01	CYLINDER, Assembly, 14 Yard	1
	210630-02	CYLINDER, Assembly, 16 Yard	1
	210630-03	CYLINDER, Assembly, 18 Yard	1
	210630-04	CYLINDER, Assembly, 20 Yard	1

CONTAINER LIFTING DEVICE CYLINDER - 406582



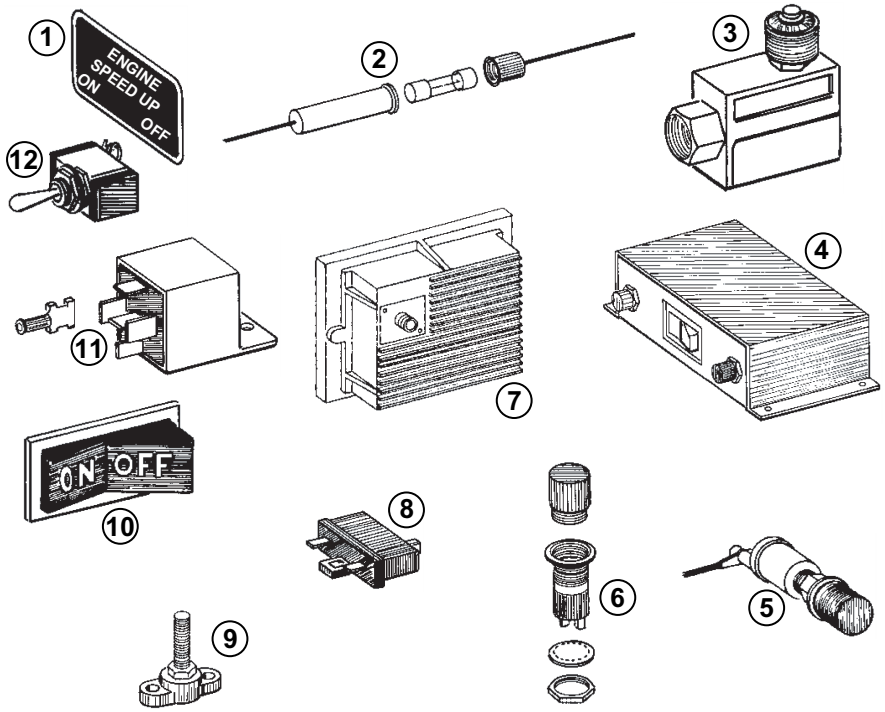
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	F5925	CAPSCREW, Socket Head, Nylock	6
2	PO-2295	SEGMENT, Lock	3
3	305167	HEAD, Gland	1
4	16155	O-RING, Head OD	1
5	107045	WIPER, Rod	1
6	106991	SEAL, Rod	1
7	405800	ROD, Piston	1
8	405925	CASE, Cylinder Weldment	1
9	106990	RING, Wear	2
10	106992	SEAL, Piston	1
11	106994	RING, Wear	1
12	107089	RING, Back Up	1
	107854	KIT, Repair (Includes Items 1, 4-6 and 9-12)	1
	406582	CYLINDER, Assembly	1

HCA CYLINDER - 407028



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	109015	RETAINER, Gland	1
2	F4725	SET SCREW, Gland Retainer	1
3	109013	ROD	1
4	108843	BARREL	1
5	F4079	NUT, Nylock, 1 1/2” UNC	1
6	109016	PISTON	1
7	109014	GLAND	1
8	108955	RETAINING RING, Internal	1
	109030	KIT, Seal	1
	407028	CYLINDER, Assembly	1

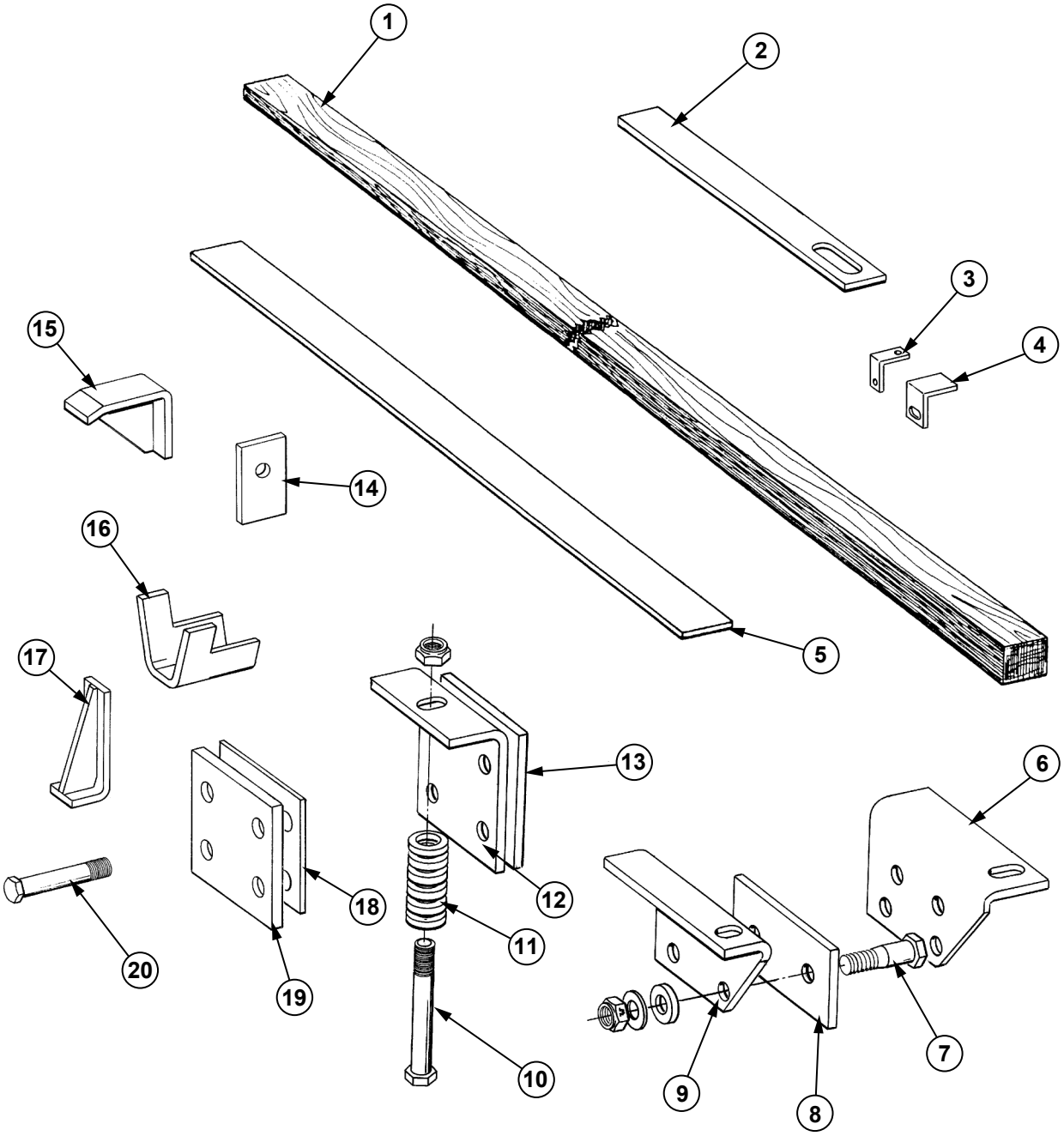
ELECTRICAL COMPONENTS



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	109059-01	DECAL, Engine Speed Up (Dashboard)	1
2	35865	HOLDER, Fuse (Glass Type Fuse)	1
	103157	HOLDER, Fuse (Spade Type Fuse)	1
3	15752	SWITCH, Neutral Safety (Required With Some Automatic Transmissions)	1
4	100527	CONTROL, PTO/Overspeed (Chelsea)	1
5	33179	BUTTON, Speed Up	1
6	38259	LIGHT, Tailgate Ajar (Before Alpha/Beta s/n 4079, Delta s/n 5053	1
	102381	BULB (For 38259 Light)	1
	604802	LIGHT, Tailgate Ajar (After Alpha/Beta s/n 4078, Delta s/n 5052)	1
7	103050	SWITCH, Overspeed (Muncie)	1
8	SK-2093	BUZZER	1
	604863	BUZZER, Dual Rate	1
9	104372	BLOCK, Insulated Terminal	1
10	378881	SWITCH, Rocker	1
11	102118	RELAY	AR
12	SK-2092	SWITCH, Toggle (Black)	1
	604799	SWITCH, Toggle (Green)	1
	604798	SWITCH, Toggle (Amber)	1

MOUNTING HARDWARE - Before Alpha/Beta

s/n 4212, Delta s/n 5059

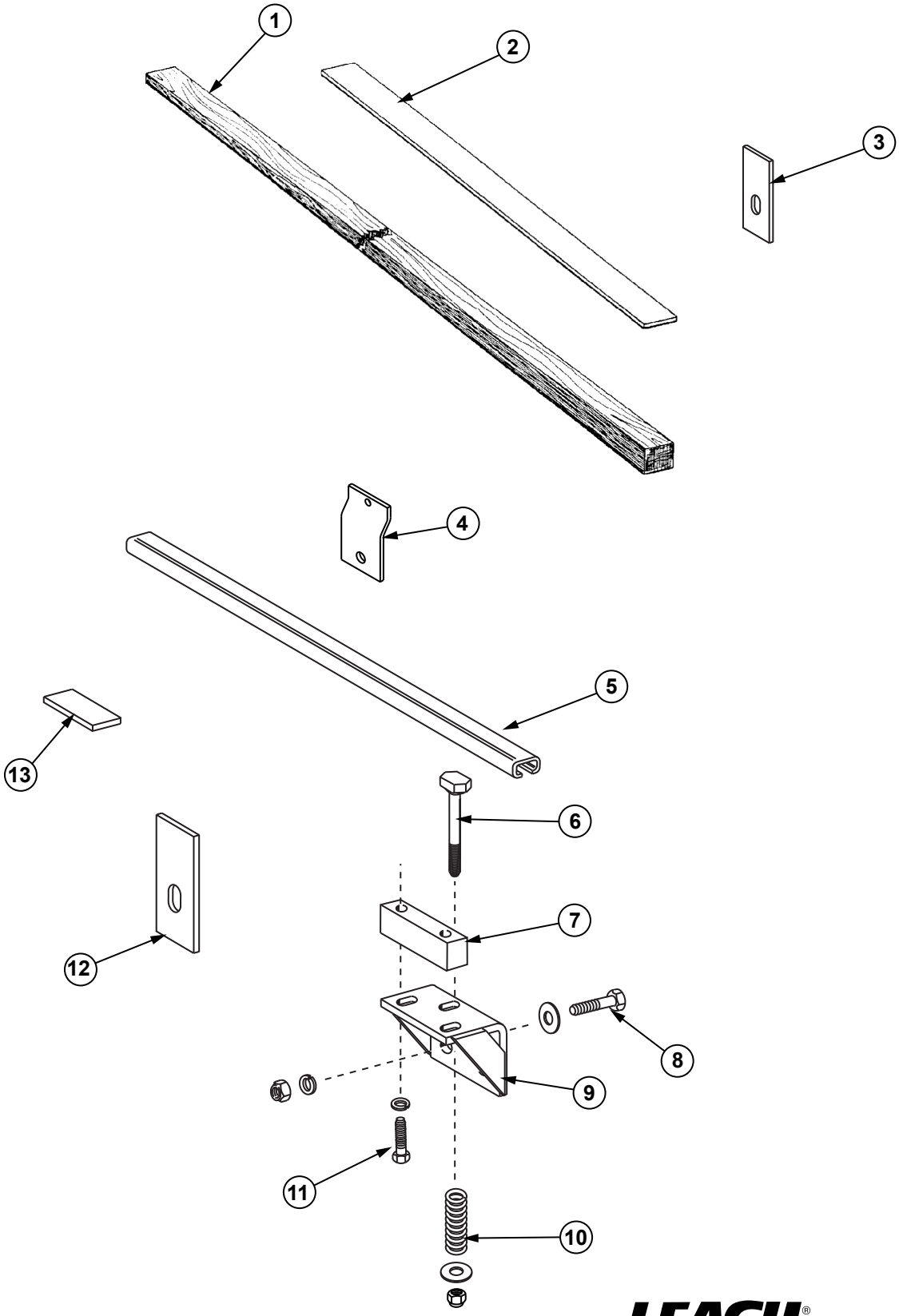


MOUNTING HARDWARE - Before Alpha/Beta s/n 4212, Delta s/n 5059

	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	201133	SILL, Wood, Tapered, 2.50 to 1.00, 20 YD	2
		201134	SILL, Wood, Tapered, 2.50 to 1.00, 25 YD	2
	2	SR-8453	SHIM, Truck Frame	AR
	3	38195	BRACKET, Sill Retaining	AR
	4	200374	BRACKET, Sill Retaining	AR
	5	108915-01	SILL, Steel, 1/2” X 4” X 107”, 14 YD	2
		108915-02	SILL, Steel, 1/2” X 4” X 129”, 16 YD	2
		108915-03	SILL, Steel, 1/2” X 4” X 142”, 18 YD	2
		108915-04	SILL, Steel, 1/2” X 4” X 155”, 20 YD	2
		108915-05	SILL, Steel, 1/2” X 4” X 191”, 25 YD	2
	6	PO-543	BRACKET, Left Front	AR
	7	40205	BOLT, Shoulder, 1” Long	AR
		2R-1658	BOLT, Shoulder, 1 1/4” Long	AR
		39939	BOLT, Shoulder, 1 1/2” Long	AR
		42026	BOLT, Shoulder, 2” Long	AR
		39966	WASHER, 1/4” Thick	AR
		41412	WASHER, 3/8” Thick	AR
		100100	NUT, Nylock, 1” UNC	AR
	8	P-16-626-4	SHIM, 3/8” x 3”	AR
		P-16-626-5	SHIM, 1/2” X 3”	AR
		P-16-626-3	SHIM, 5/8” X 3”	AR
		P-16-626-2	SHIM, 3/4” X 3”	AR
		P-16-626-1	SHIM, 1” X 3”	AR
	9	PO-542	BRACKET, Right Front	AR
	10	F2475	BOLT, Front Mount	AR
		F3975	NUT, Nylock, 1”	AR
	11	16107	SPRING	AR
	12	PO-1402	MOUNTING SHOE	AR
	13	30161	SHIM, 1/4” X 4” X 8”	AR
		30162	SHIM, 1/2” X 4” X 8”	AR
		30163	SHIM, 5/8” X 4” X 8”	AR
		18141	SHIM, 3/4” X 4” X 8”	AR
	14	16286	SPACER, 1/4” X 3”	AR
		16287	SPACER, 1/2” X 3”	AR
		16288	SPACER, 5/8” X 3”	AR
		16289	SPACER, 3/4” X 3”	AR
	15	304743	LATERAL, Restraint, Lower	2
	16	301638	SHOE, Upper	AR
	17	304741	LATERAL, Restraint, Upper	2
	18	206420	SHIM, .0598”	AR
		206421	SHIM, .12”	AR
		206422	SHIM, .19”	AR
		206423	SHIM, .25”	AR
	19	206419	PLATE, Wear	1
	20	F0376	CAPSCREW, 3/8” X 1 1/2” UNC	8
		F7875	WASHER, Lock, 3/8”	8
		F2975	NUT, 3/8” UNC	8

MOUNTING HARDWARE - After Alpha/Beta

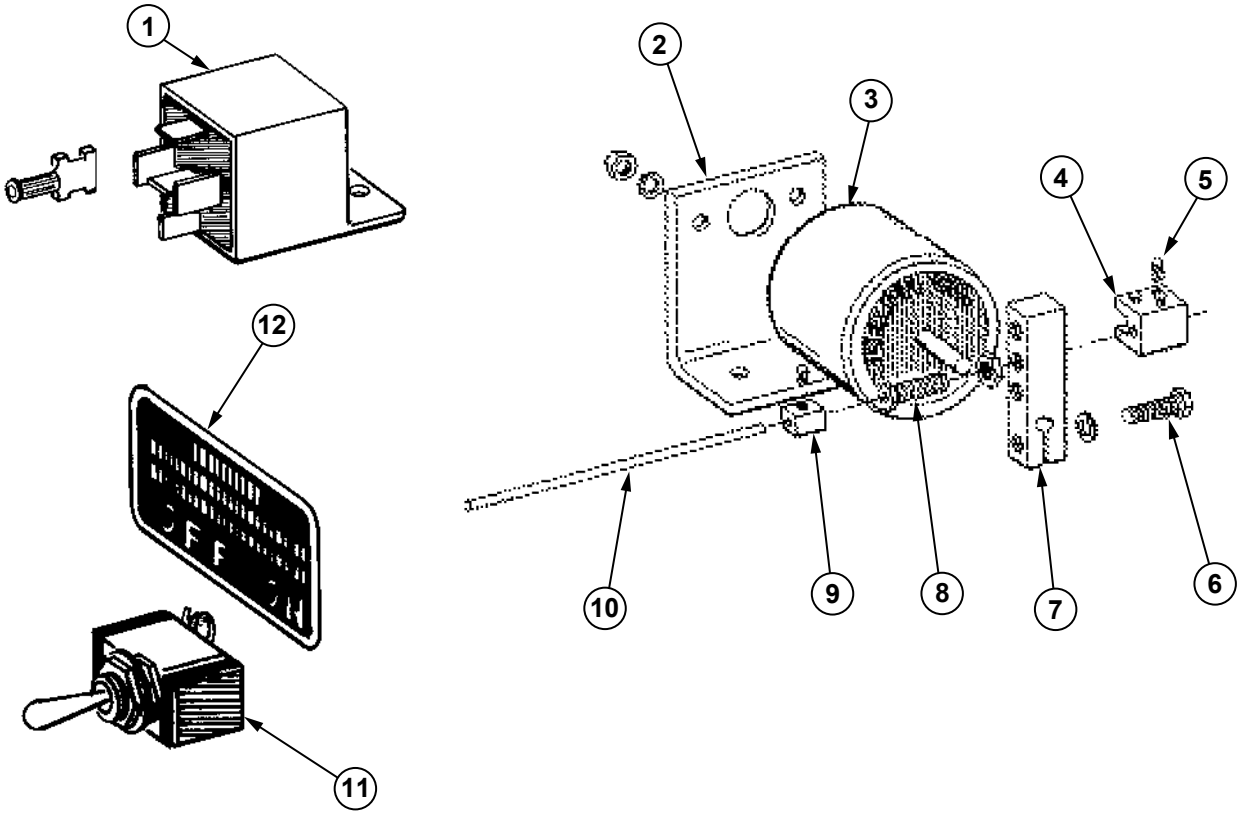
s/n 4211, Delta s/n 5058



MOUNTING HARDWARE - After Alpha/Beta s/n 4211, Delta s/n 5058

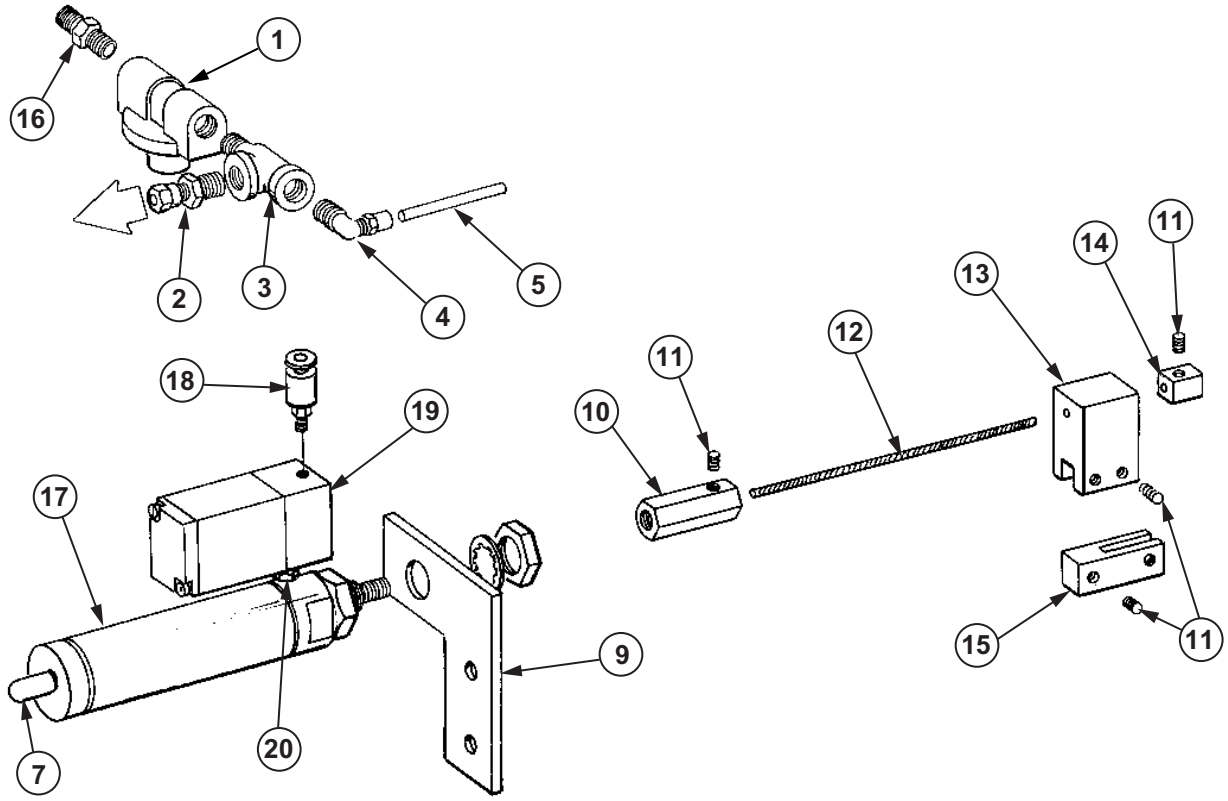
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	202158	SILL, Wood, 1 1/2” Straight, (Standard Sill for 14, 16 18, 20 YD)	2
	604794	SILL, Wood, 3 1/2” to 1” Taper (Standard Sill for 25 YD)	2
2	108915-01	SILL, Steel, 1/2” X 4” X 107”, 14 YD	2
	108915-02	SILL, Steel, 1/2” X 4” X 129”, 16 YD	2
	108915-03	SILL, Steel, 1/2” X 4” X 142”, 18 YD	2
	108915-04	SILL, Steel, 1/2” X 4” X 155”, 20 YD	2
	108915-05	SILL, Steel, 1/2” X 4” X 191”, 25 YD	2
3	107417	RETAINER, Sill (Used With Steel Sills)	AR
	F1425	CAPSCREW, 5/8” X 2 1/4” UNC	AR
	F3500	NUT, 5/8” UNC	AR
4	605858	RETAINER, Sill (Used With Wood Sills)	AR
	F1425	CAPSCREW, 5/8” X 2 1/4” UNC	AR
	F3500	NUT, 5/8” UNC	AR
	F7430	WASHER, Hardened	AR
	F5350	CARRIAGE BOLT, 3/8” X 4” UNC	AR
	F2975	NUT, 3/8” UNC	AR
	F7250	WASHER, 3/8” Flat	AR
	F7875	WASHER, 3/8” Lock	AR
5	602416	RAIL, Mounting	2
6	603736	T-BOLT	2
	F3720	NUT, Lock, 3/4” UNC	2
	F7475	WASHER, Flat, 3/4”	2
7	603826	RESTRAINT, Lateral	2
8	F1790	BOLT, 3/4” X 2 1/2” UNC GR. 8	4
	F3715	NUT, 3/4” UNC GR. 8	4
	F7475	WASHER, Flat, 3/4”	4
	F8075	WASHER, Lock, 3/4”	4
9	602569	BRACKET, Body Mounting	2
10	16107	SPRING, Mounting	2
11	F1382	BOLT, 5/8” X 1 3/4’ UNC GR. 8	4
	F7430	WASHER, Hardened	4
	F8050	WASHER, Lock, 5/8”	4
12	203057	SHIM, Rear Mounting, 1/8”	AR
	16286	SHIM, Rear Mounting, 1/4”	AR
	16285	SHIM, Rear Mounting, 3/8”	AR
	16287	SHIM, Rear Mounting, 1/2”	AR
	16288	SHIM, Rear Mounting, 5/8”	AR
	16289	SHIM, Rear Mounting, 3/4”	AR
13	P-16-626-4	SHIM, 3/8” x 3”	AR
	P-16-626-5	SHIM, 1/2” X 3”	AR
	P-16-626-3	SHIM, 5/8” X 3”	AR
	P-16-626-2	SHIM, 3/4” X 3”	AR
	P-16-626-1	SHIM, 1” X 3”	AR
	40205	BOLT, Shoulder, 1” Long (Rear Mount, Not Shown)	2
	2R-1658	BOLT, Shoulder, 1 1/4” Long (Rear Mount, Not Shown)	2
	39939	BOLT, Shoulder, 1 1/2” Long (Rear Mount, Not Shown)	2
	42026	BOLT, Shoulder, 2” Long (Rear Mount, Not Shown)	2
	39966	WASHER, 1/4” Thick (Rear Mount, Not Shown)	2
	41412	WASHER, 3/8” Thick (Rear Mount, Not Shown)	2
	100100	NUT, Nylock, 1” UNC (Rear Mount, Not Shown)	2

SPEED UP (ELECTRICALLY OPERATED)



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	102118	RELAY, Speed Up	1
2	SK-1734	BRACKET	1
3	SK-1733	SOLENOID, Speed Up, Assembly	1
	SK-2308	SOLENOID Only	1
4	SK-6651	CLAMP	1
	SK-1738	YOKE, Clamp	AR
5	F4555	SCREW, Set, Socket Head, 10-32 X 1/4”	2
6	F0125	SCREW, Cap, 5/16” X 7/8” UNF	1
	F7175	WASHER, Flat, 5/16”	1
7	SK-1735	LEVER	1
8	SK-1736	SCREW, Cap, Drilled	1
9	SK-1737	CLAMP	1
10	SK-1733-10	CABLE, Speed Up	1
11	SK-2092	SWITCH, Toggle, Dash (Black)	1
12	109059-01	DECAL, Solenoid Instruction	1

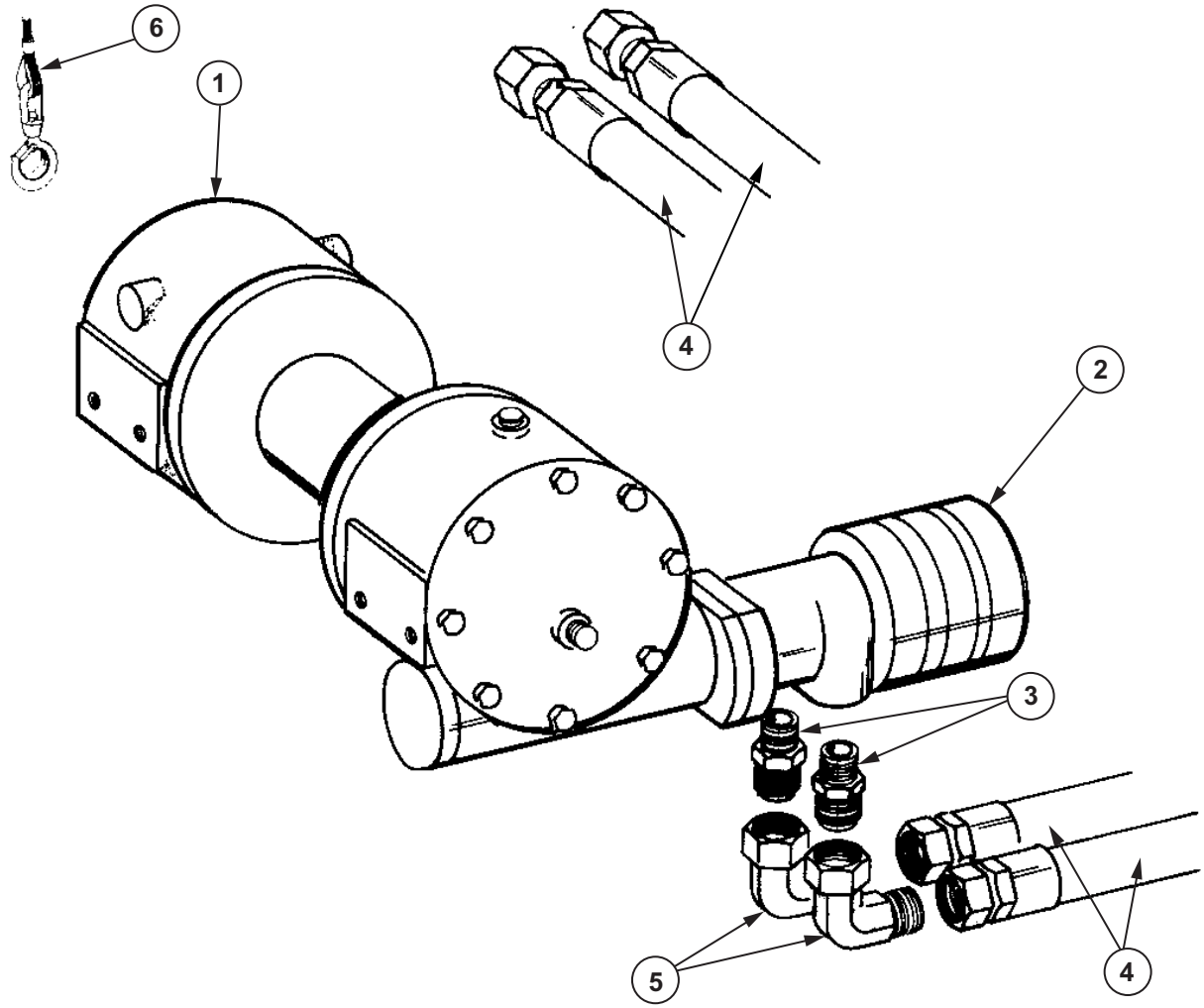
SPEED UP (AIR OPERATED)



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	30138	VALVE, Pressure Protection	1
2	39217	CONNECTOR	2
	102653	CONNECTOR	2
3	@0044	TEE, 1/4" NPT	1
4	39928	ELBOW	3
5	39923	TUBING, 1/4" Nylon	10 Ft
6	16667	VALVE, Solenoid	1
7	39996	MUFFLER	1
8	18963	CYLINDER, Air	1
9	18965	BRACKET	1
10	18964	COUPLER	1
11	F4555	SCREW, Set, Socket Head, 10-32 X 1/4" UNF	AR
12	SK-1733-10	CABLE, Speed Up	1
13	SR-6651	CLAMP	AR
14	SK-1737	CLAMP, Cable	1
	202858	CLAMP, Cable	1
15	SK-1738	CLAMP, Yoke	AR
16	36860	NIPPLE, Hex, 1/4"	1
17	102654	CYLINDER, Air	1
18	102653	FITTING, Air Cylinder	1
	104882	FITTING, Air Cylinder, 1/16" NPT	1
19	102655	VALVE, Solenoid	1
20	102791	NIPPLE, Hex	1
17	SK-1738	CLAMP, Yoke	AR
	203141	CYLINDER & Valve Assembly, (Includes Items 14-16 & 18)	1
	203140	KIT, Air Operated, Speed Up, (Includes Items 1-2, 5 & 9)	1

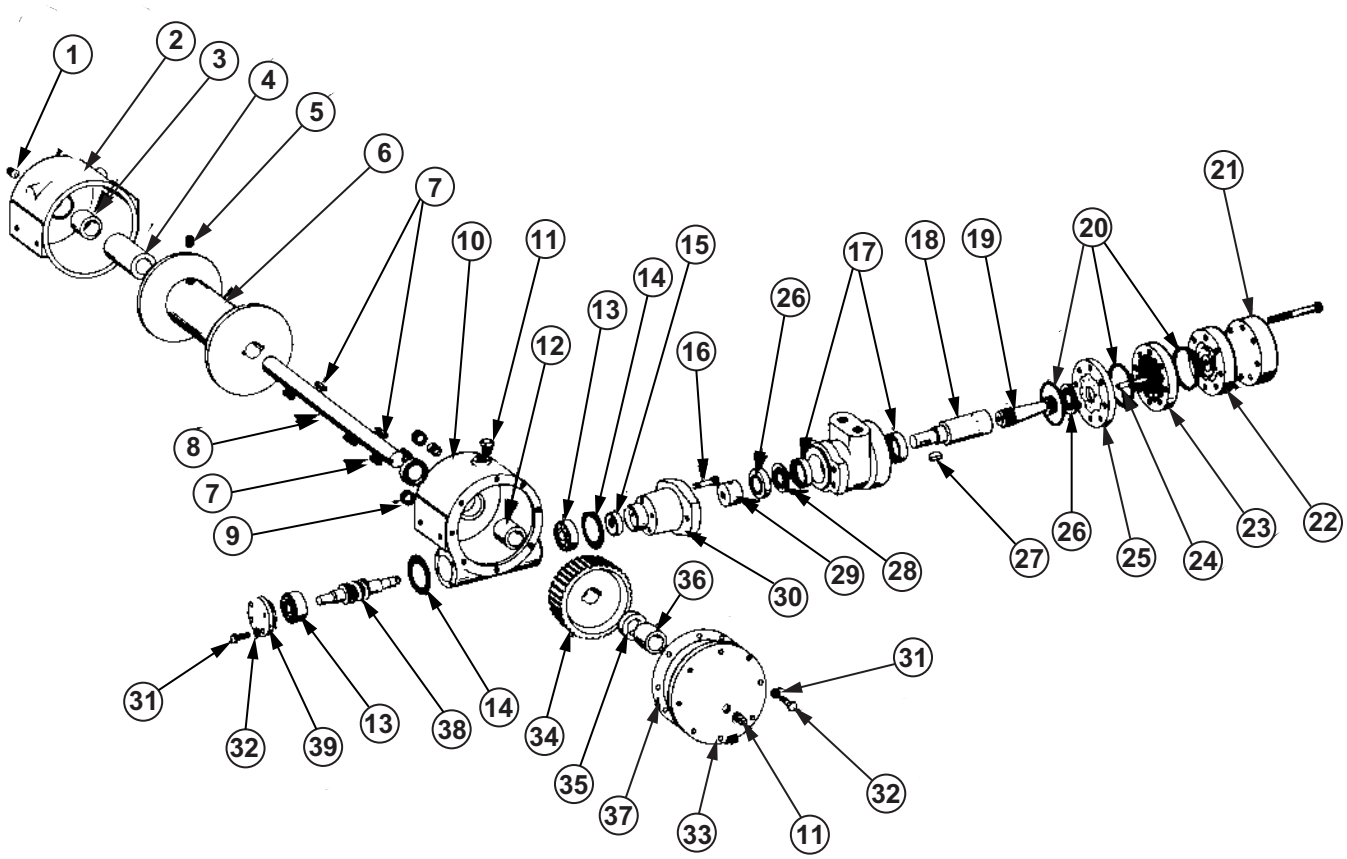
SECTION 9

8,000 LB. WINCH ASSEMBLY



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	100375	WINCH	1
2	101770	MOTOR	1
3	100356	CONNECTOR, Male, O-Ring	2
4	210879	HOSE	2
5	17718	ELBOW	2
6	307250	ASSEMBLY, Cable	1
	211133	BRACKET, Winch Frame, Rear (Not Shown)	1
	307013	BRACKET, Winch Frame, Front (Not Shown)	1
	406710	BRACKET, Winch Frame, Side (Not Shown)	2
	17718	BRACKET, Winch Frame, Support, Vertical (Not Shown)	2

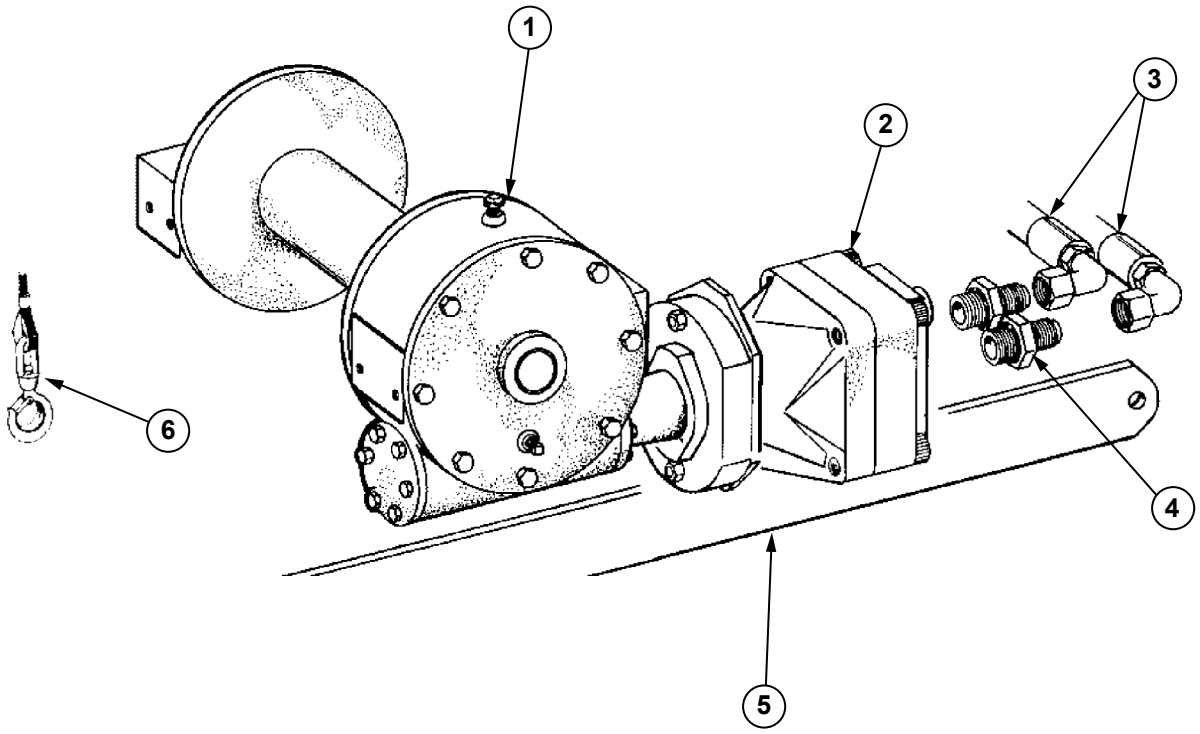
8,000 LB. WINCH 100375 AND MOTOR 101770



8,000 LB. WINCH 100375 AND MOTOR 101770

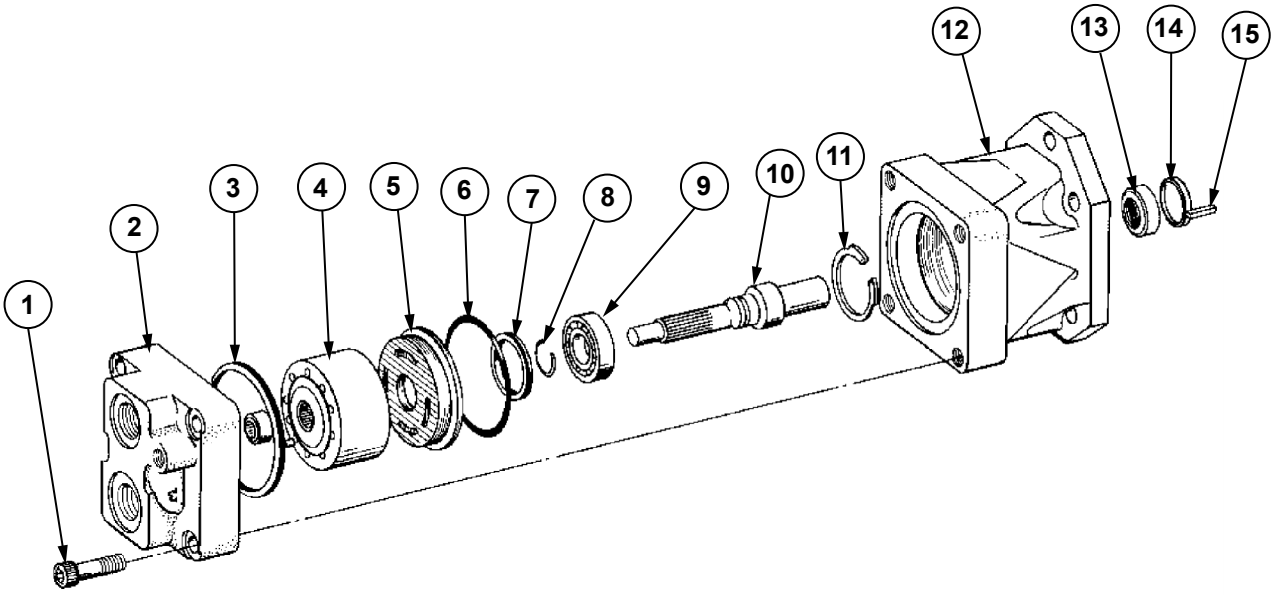
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	N/A	SCREW, Set, 1/4" X 1/2" UNC	1
2	100665	HOUSING, Clutch	1
3	100674	BUSHING	1
4	100673	COLLAR	1
5	F4725	SCREW, Set, 3/8" X 1/2" UNC	1
6	100663	DRUM, Cable	1
7	100676	KIT, Key	1
8	100669	SHAFT, Cable Drum	1
9		SEAL, Oil (Included In Seal Kit 100680)	
10	102278	CASE, Gear	1
11	102259	PLUG	3
12	100672	BUSHING	2
13	100681	BEARING	2
14		GASKET (Included In Seal Kit 100680)	1
15		SEAL (Included In Seal Kit 100680)	1
	100680	KIT, Gasket & Seal, (Includes Items 9, 14-16 and 37)	1
16		SCREW, Cap, Socket Head, 1/4" X 1 1/4" UNC	4
17	102265	BEARING, Roller	2
18	100684	SHAFT	1
19	N/A	LINK, Drive	1
20		SEAL (Included In Seal Kit 100682, Items 20 and 28)	3
21	N/A	COVER	1
22	N/A	PLATE, Pressure	1
23	N/A	STATOR, Roller	1
24	N/A	PIN, Aligning	1
25	N/A	PLATE, Wear	1
26	102264	BEARING, Thrust	2
27	102267	KEY, Woodruff	1
28		SEAL, Dust, (included In Seal Kit 100682, Items 20 and 28)	1
29	100675	COUPLER, Motor Shaft	1
30	100666	ADAPTER, Motor Mount	1
31		SCREW, Cap, 1/4" X 3/4" UNC	12
32		WASHER, Lock, 1/4"	2
33	100664	COVER, Gear Case	1
34	100668	GEAR	1
35	100679	COLLAR	1
36	100671	BUSHING	1
37		GASKET (Included In Seal Kit 100680)	1
38	100670	WORM, Shaft	1
39	100667	HUB, Bearing	1
	100375	WINCH, Assembly	1
	101770	MOTOR, Assembly	1

12,000 LB. WINCH ASSEMBLY



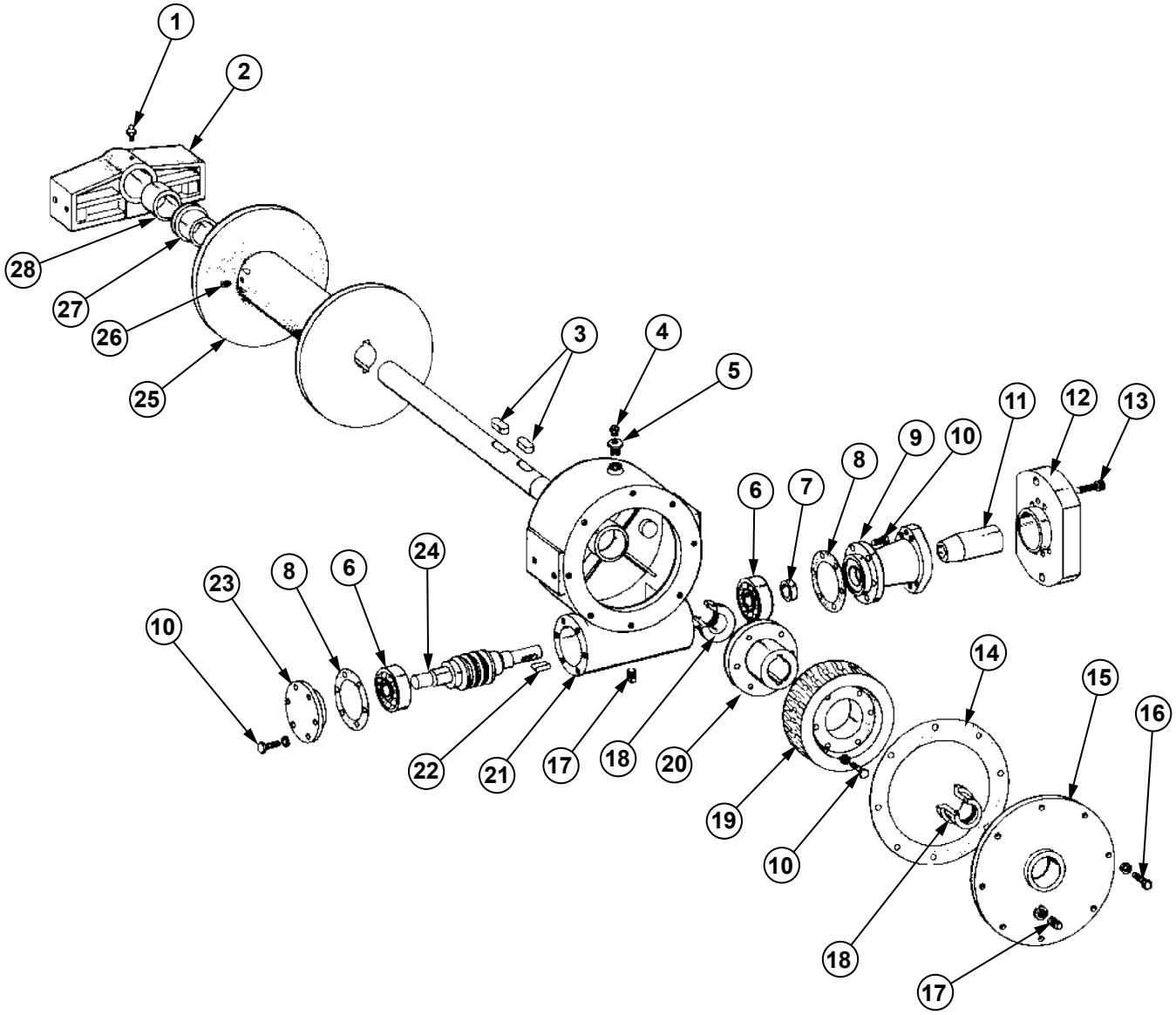
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	100596	WINCH	1
2	100597	MOTOR	1
3	210877	HOSE	2
	210869	TUBE, Hose to Connector (Not Shown)	2
4	108807	CONNECTOR	2
5	406710	BRACKET, Winch Frame, Side	2
	307013	BRACKET, Winch Frame, Front (Not Shown)	1
	211133	BRACKET, Winch Frame, Rear (Not Shown)	1
	210700	BRACKET, Winch Frame Support, (Not Shown)	2
6	307250	ASSEMBLY, Winch Cable	1
	100258	HOSE, Drain, 5/8” ID (Not Shown)	30 FT
	100255	CONNECTOR, Drain Line (Not Shown)	2

HYDRAULIC MOTOR - 100597



REF. NO.	PART NO.	DESCRIPTION	QTY.
1		SCREW, Cap, Socket Head, 5/8" X 2 3/4" UNC	4
2	NSS	END CAP (Not Sold Separately)	1
3		O-RING (Included in 41366 Seal Kit)	1
4	NSS	ASSEMBLY, Cam Ring and Rotor (Not Sold Separately)	1
5	NSS	ASSEMBLY, Front Plate	1
6		O-RING (Included in 41366 Seal Kit)	1
7		SEAL (Included in 41366 Seal Kit)	1
8	41363	SNAP RING	1
9	41364	BEARING	1
10	NSS	SHAFT	1
11	41362	SNAP RING	1
12	NSS	BODY (Not Sold Separately)	1
13		SEAL (Included in 41366 Seal Kit)	1
14		WIPER (Included in 41366 Seal Kit)	1
15	@0139	KEY	1
	41366	KIT, Seal (Includes Items 3, 6-7 and 13-14)	1
	100597	MOTOR, Assembly	1

12,000 LB. WINCH - 100596

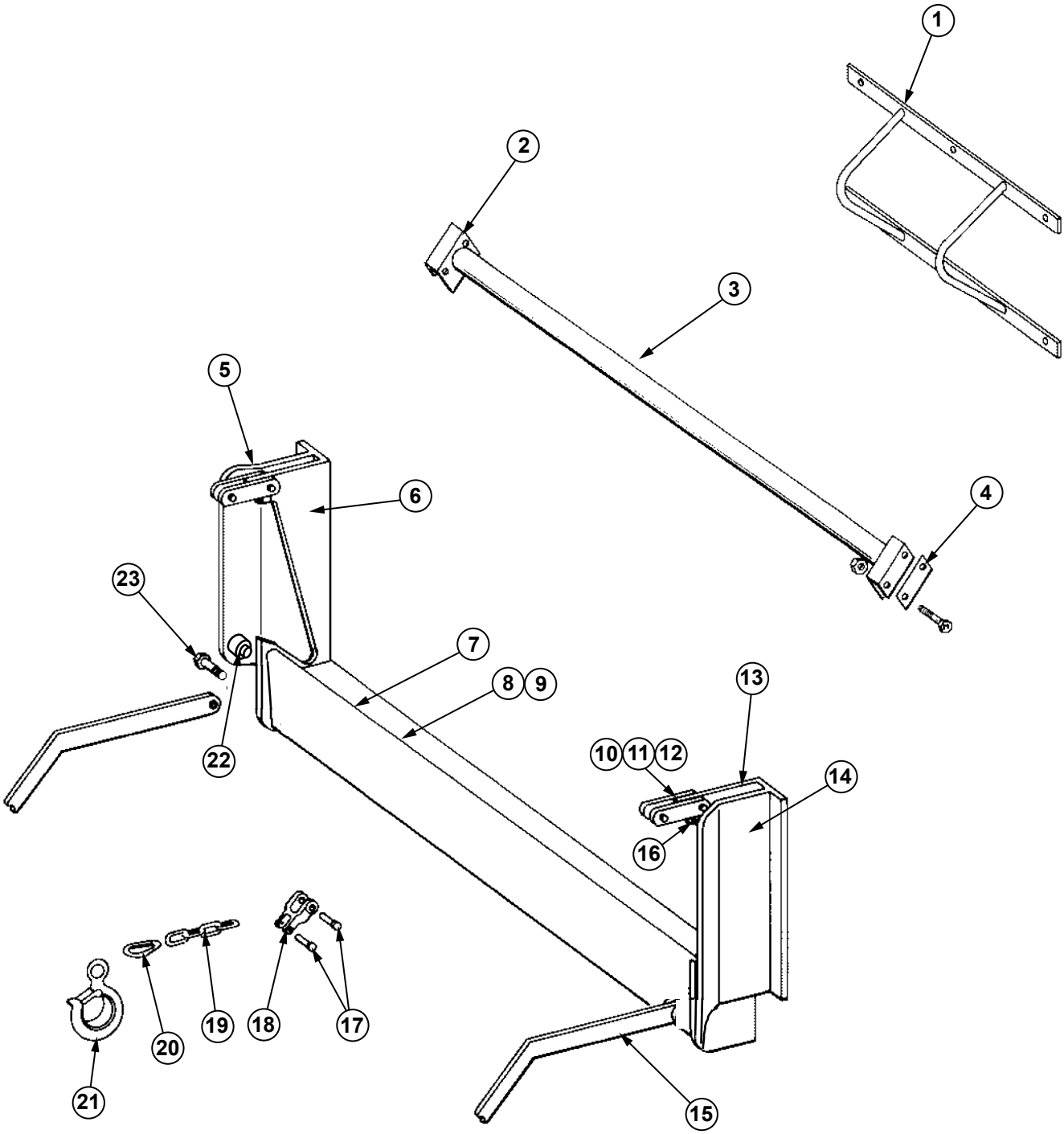


12,000 LB. WINCH - 100596

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	16170	FITTING, Grease	1
2	NSS	BRACKET, End Bearing	1
3	102320	KEY	2
4	102311	BREATHER	1
5	NSS	REDUCER, Breather	1
6	102307	BEARING	2
7	102313	SEAL	1
8	102306	GASKET	2
9	102314	ADAPTER	1
10	F0325	SCREW, Cap, 3/8” X 1 1/4” UNC	18
11	102315	COUPLING	1
12	NSS	PLATE, Adapter	1
13	F6425	SCREW, Cap, Socket Head, 5/8” X 2” UNC	2
14	102296	GASKET	1
15	NSS	COVER	1
16	F0150	SCREW, Cap, 5/16” X 1” UNC	8
	F7775	WASHER, Lock, 5/16”	8
17	@0208	PLUG, Pipe, 1/2” NPT	2
18	102297	BUSHING	2
19	102301	GEAR	1
20	NSS	HUB, Gear	1
21	NSS	HOUSING, Gear	1
22	102309	KEY	1
23	102305	CAP, Bearing	1
24	102308	WORM GEAR	1
25	102322	DRUM	1
26	F4725	SCREW, Set, 3/8” X 1/2” UNC	1
27	102324	BUSHING	1
28	102325	BUSHING	1
	100596	ASSEMBLY, Winch	1

LATCH AND GUIDE EAR ASSEMBLY, Before

ALPHA/BETA S/N 4046 DELTA S/N 5052



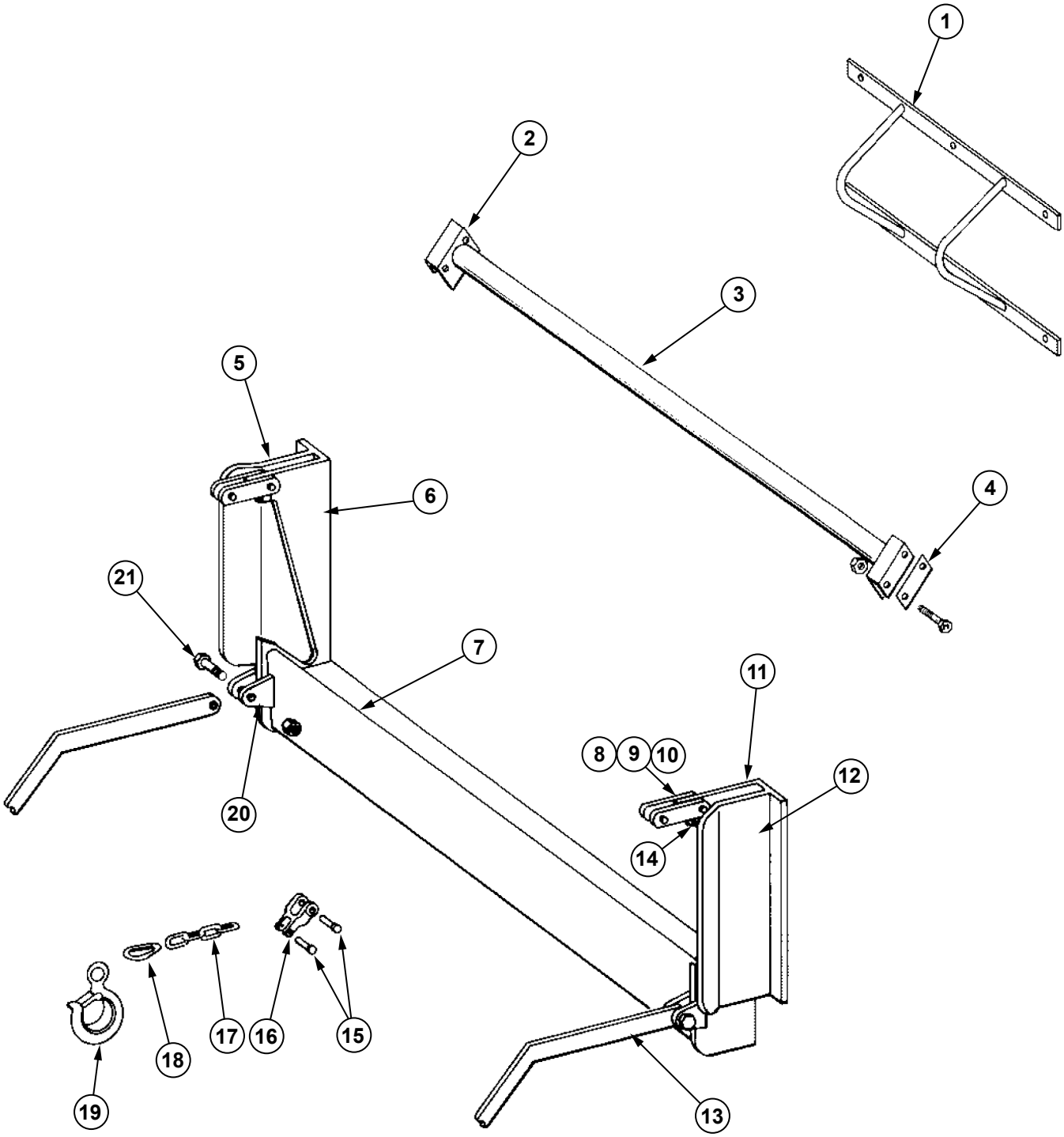
LATCH AND GUIDE EAR ASSEMBLY, Before

ALPHA/BETA S/N 4046, DELTA S/N 5052

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	307104	WELDMENT, Light Guard	2
2	203379	WELDMENT, Sleeve Support	2
3	200578	PIPE, Container Stop	1
4	203178	PAD, Clamping	2
	F0979	SCREW, Cap, 1/2” X 1 1/2” UNC	4
	F3325	NUT, Nylock, 1/2” UNC	4
	F7375	WASHER, Flat, 1/2”	4
5	407013	GUIDE EAR, Left Hand	1
6	602231	WELDMENT, Trunnion, Left Hand	1
7	407018	WELDMENT, Sill Extension (Includes Items 8 and 9)	1
8	407017	EXTENSION, Load Sill	1
9	307364	END CAP, Sill Extension	2
10	211211	WELDMENT, Pin and Link	2
11	15016	PIN, Link	2
12	211331	STOP GUARD, Hasp	2
13	602232	WELDMENT, Trunnion, Right Hand	1
14	407012	GUIDE EAR, Right Hand	1
15	211189	ARM, Latch	2
16	108669	SPRING PLUNGER	2
17	15016	PIN (Manual Container Attachment)	4
18	100146	CLEVIS, Double (Manual Container Attachment)	2
19	102382	CHAIN (Manual Container Attachment)	2
20	100146	LINK, Clevis	2
21	100028	HOOK (Manual Container Attachment)	2
22	210737	PIVOT, Arm	2
23	F0981	SCREW, Cap, 1/2” X 1 1/2” UNC	2
	F3325	NUT, Nylock, 1/2” UNC	2
	F7350	WASHER, Flat, 1/2”	2
	41876	WASHER	2

LATCH AND GUIDE EAR ASSEMBLY, After

ALPHA/BETA S/N 4045, DELTA S/N 5051

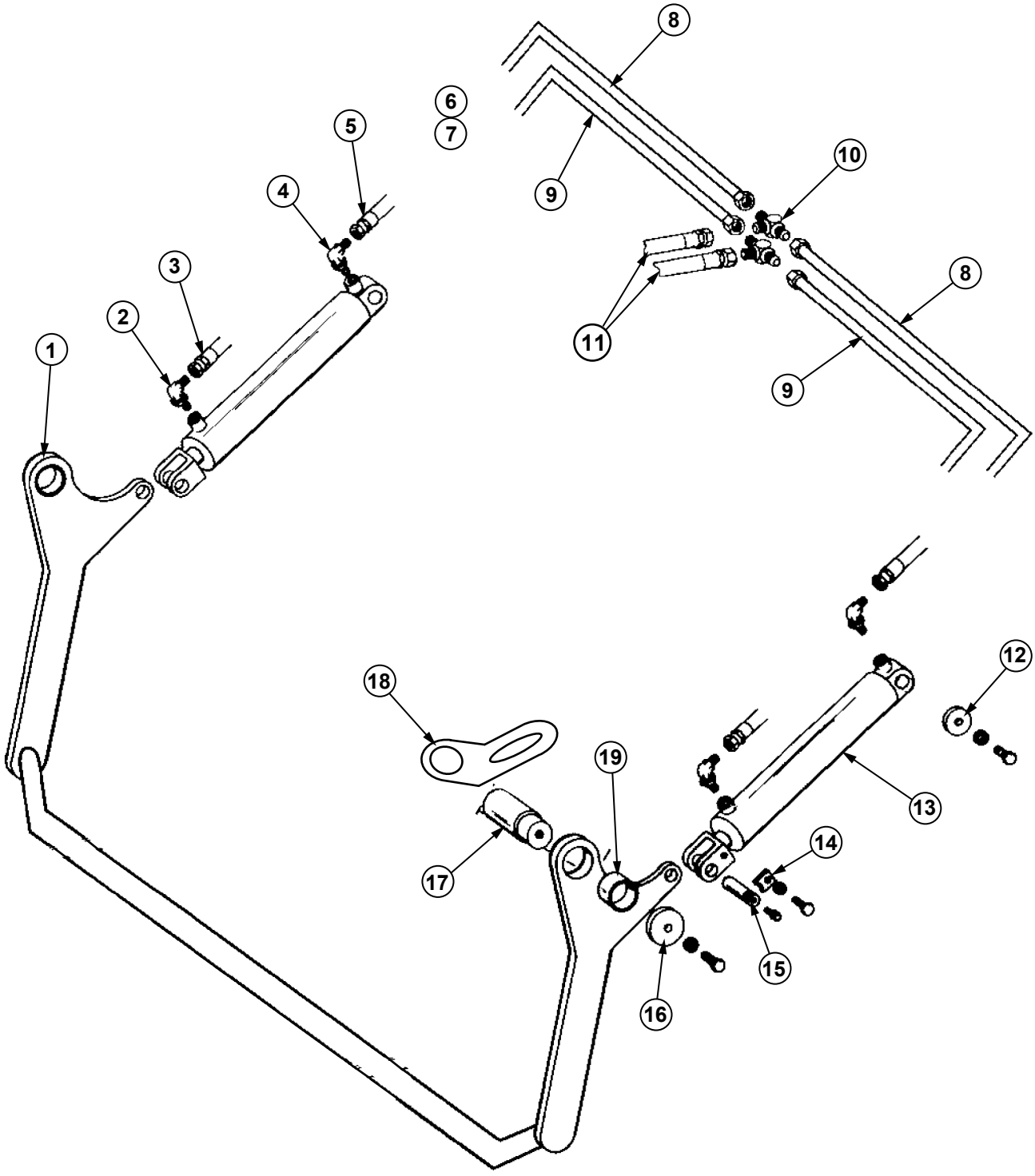


LATCH AND GUIDE EAR ASSEMBLY, After

ALPHA/BETA S/N 4045, DELTA S/N 5052

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	307104	WELDMENT, Light Guard	2
2	203379	WELDMENT, Sleeve Support	2
3	200578	PIPE, Container Stop	1
4	203178	PAD, Clamping	2
	F0979	SCREW, Cap, 1/2” X 1 1/2” UNC	4
	F3325	NUT, Nylock, 1/2” UNC	4
	F7375	WASHER, Flat, 1/2”	4
5	602243	GUIDE EAR, Left Hand	1
6	602231	WELDMENT, Trunnion, Left Hand (Includes Latch Assembly)	1
	211197	GUSSET	1
7	602218	EXTENSION, Load Sill	1
8	211211	WELDMENT, Pin and Link	2
9	15016	PIN, Link	2
10	211331	STOP GUARD, Hasp	2
11	604244	GUIDE EAR, Right Hand	1
12	602232	WELDMENT, Trunnion, Right Hand (Includes Latch Assembly	1
	211197	GUSSET	1
13	602255	ARM, Latch (Standard)	2
14	108669	SPRING PLUNGER	2
15	15016	PIN (Manual Container Attachment)	4
16	100146	CLEVIS, Double (Manual Container Attachment)	2
17	102382	CHAIN (Manual Container Attachment)	2
18	100146	LINK, Clevis	2
19	100028	HOOK (Manual Container Attachment)	2
20	602220	PIVOT, Ear	4
21	F1750	SCREW, Cap, 3/4” X 2 1/2” UNC	2
	F3730	NUT, Lock, 3/4” UNC	2

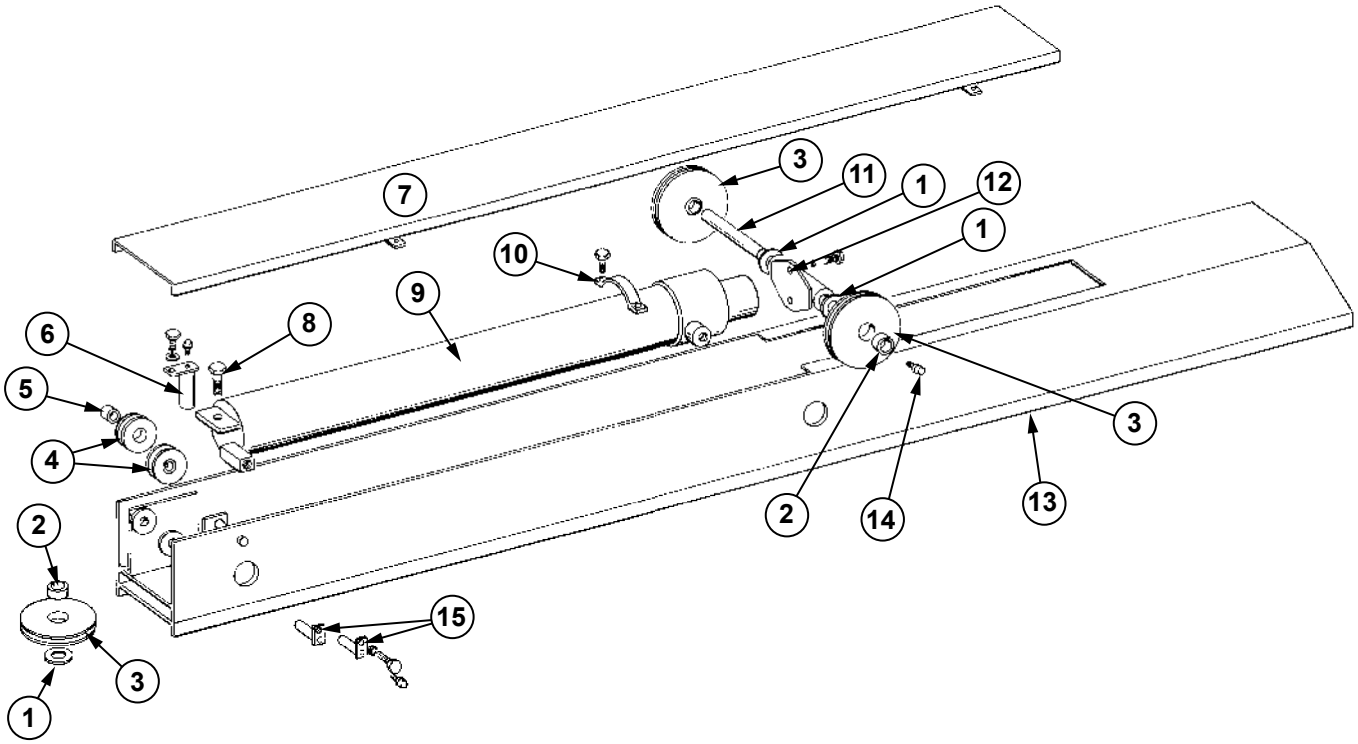
CONTAINER PUSH BAR (CPB)

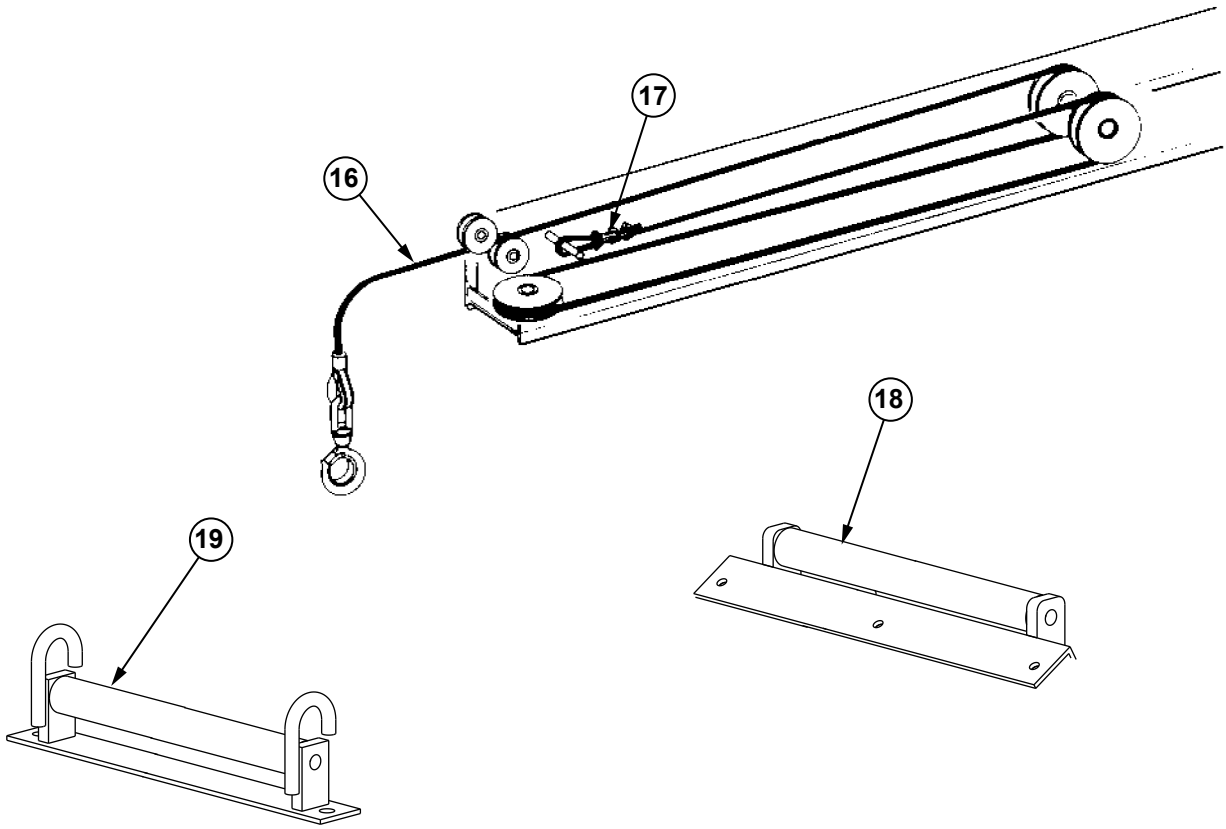


CONTAINER PUSH BAR (CPB)

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	407027	WELDMENT, Container Lift (Includes Arms and Lift Bar)	1
	307351	WELDMENT, Arm, Left Hand (Standard)	1
	307352	WELDMENT, Arm, Right Hand (Standard)	1
	602603	WELDMENT, Arm, Left Hand (Extended for Tippers)	1
	602602	WELDMENT, Arm, Right Hand (Extended for Tippers)	1
	306083	END, Lift Tube (Mitered)	2
	307365	LIFT TUBE	1
2	104389	ELBOW, 90 Degree, O-RING	2
3	211241	HOSE, Cylinder, Rod End	2
4	108777	ELBOW, 45 Degree, O-RING	2
5	211240	HOSE, Cylinder, Case End	2
6	100137	FITTING, Bulkhead (Not Shown)	4
7	108950	SUPPORT, Hose, Twin (Not Shown)	4
8	210787	TUBE (For Rod End of Cylinders)	2
9	210788	TUBE (For Case End of Cylinders)	2
10	18268	FITTING, Union Tee	2
11	210786	TUBE (From Tee Fitting to Valve)	2
12	PO-205	COVER, Pivot, Lower	2
	211230	SPACER, Lower Pivot	2
	F1630	SCREW, Cap, 3/4” X 1 1/2” UNC	2
	F8075	WASHER, Lock, 3/4”	2
13	407028	CYLINDER, Container Lift	2
14	PO-421	RETAINER, Pin	2
	F0258	SCREW, Cap, 3/8” X 3/4” UNC	2
	F7875	WASHER, Lock, 3/8”	2
15	PO-420	PIN, Pivot	2
16	602333	COVER, Pivot	2
	F0950	SCREW, Cap, 1/2” X 1 1/4” UNC	2
	F7975	WASHER, Lock, 1/2”	2
17	602335	PIN, Pivot, Upper	2
18	307404	PLATE, Upper Pivot	2
	211217	GUSSET, Pivot to Guide Ear (Not Shown)	2
19	15269	BEARING	2

CONTAINER LIFT CYLINDER (CLC)

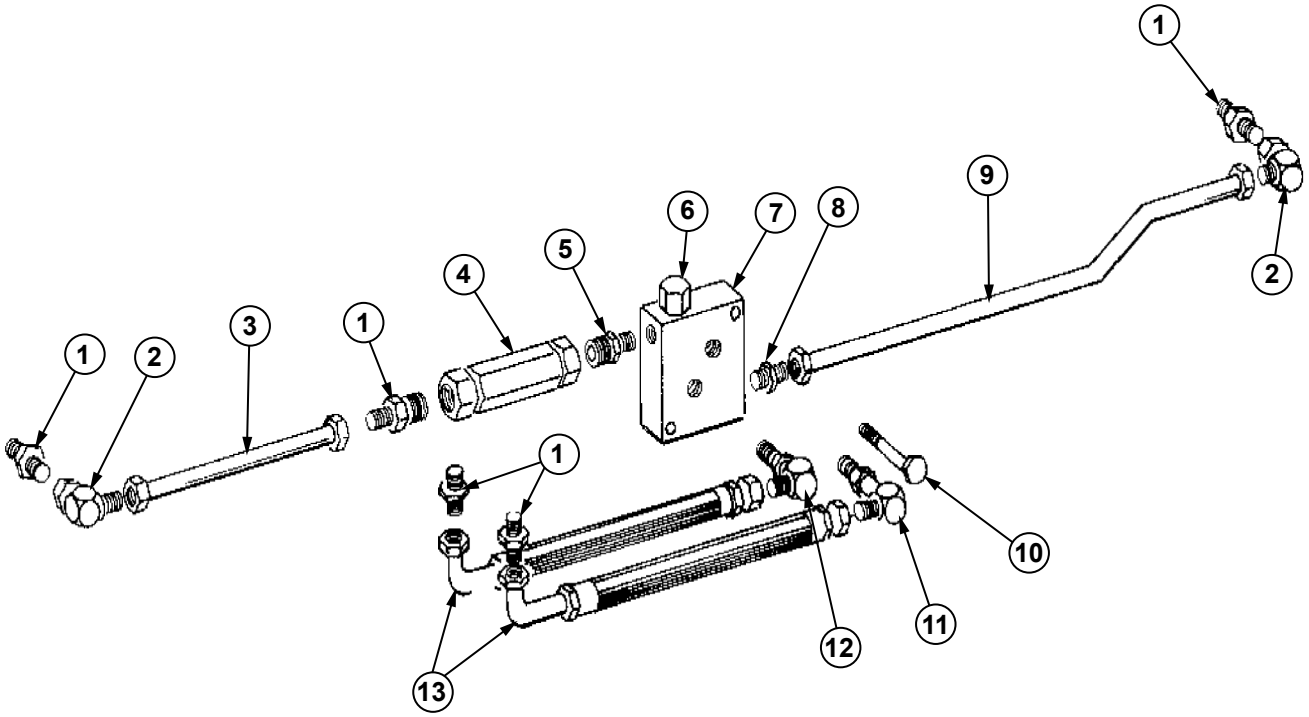




CONTAINER LIFT CYLINDER (CLC)

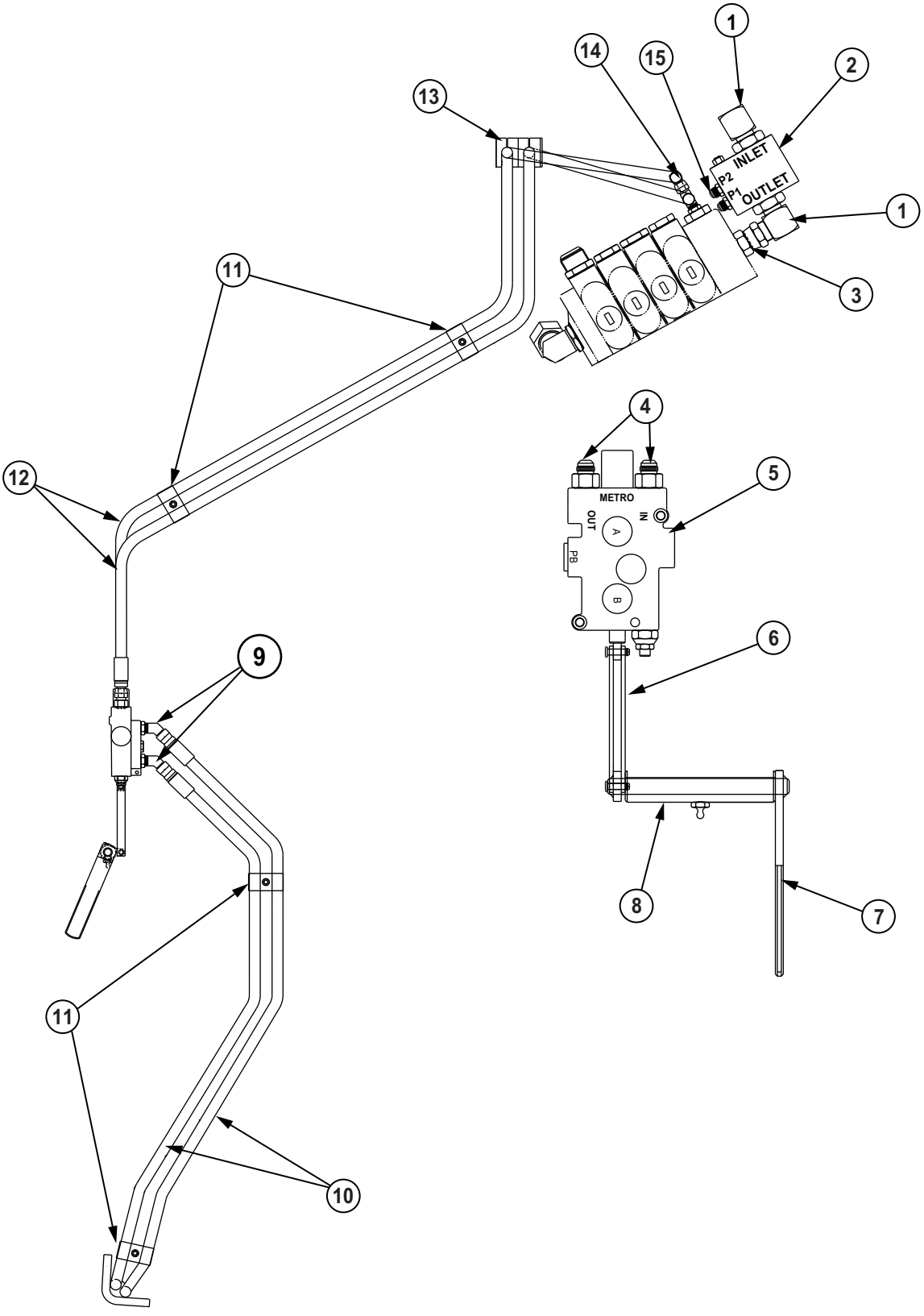
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	101864	WASHER, Thrust	3
2	101701	BUSHING	3
3	301451	SHEAVE, Large (With 101701 Bushing)	3
4	202218	SHEAVE, Small (With 101702 Bushing)	2
5	101702	BUSHING	2
6	202988	PIN, Large Sheave	1
	F0022	SCREW, Cap, 1/4” X 3/4” UNF	3
	F7750	WASHER, Lock 1/4”	3
7	301921	WELDMENT, Cover	1
	F0100	SCREW, Cap, 5/16” X 7/8” UNC	4
	F7200	WASHER, Flat, 5/16”	8
	F7775	WASHER, Lock, 5/16”	4
	F2850	NUT, Hex, 5/16” UNC	4
8	F1725	SCREW, Cap, 3/4” X 2” UNC	1
	F8075	WASHER, Lock, 3/4”	1
	F3650	NUT, Hex, 3/4” UNC	1
9	406582	CYLINDER, Winch	1
10	41861	STRAP, Cylinder	1
	F0960	SCREW, Cap, 1/2” X 1 1/4” UNC	2
	F7975	WASHER, Lock 1/2”	2
11	202967	PIN, Sheave	1
12	202516	WELDMENT, Pivot	1
	F0900	SCREW, Socket Head, 1/2” X 1” UNC	2
13	402088	WELDMENT, Enclosure, Cylinder	1
14	16170	FITTING, Grease	5
15	202989	WELDMENT, Pin, Small Sheave	2
	F0022	SCREW, Cap, 1/4” X 3/4” UNC	3
	F7750	WASHER, Lock, 1/4”	3
16	301803	ASSEMBLY, Cable, 56 FT	1
17	100308	CLAMP, Cable	3
18	211245	ASSEMBLY, Roller Guide, Upper	1
19	306078	ASSEMBLY, Roller, Lower	1
	305510	ASSEMBLY, Container Lift Cylinder	1

CONTAINER LIFT CYLINDER HYDRAULICS



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	18258	CONNECTOR, Straight Thread	5
2	17718	ELBOW	2
3	306279	TUBE, Assembly	1
4	108108	VALVE, Check, Orifice	1
5	107851	UNION, Straight Thread, O-Ring	1
6	602895	CARTRIDGE, Flow Control, Extend (Upper)	1
	940112	CARTRIDGE, Flow Control, Retact (Lower)	1
7	306073	VALVE, Flow Regulator (With Cartridges)	1
8	16214	CONNECTOR, Straight Thread	1
9	306286	TUBE, Assembly	1
10	F1076	SCREW, Cap, 1/2” X 2 3/4” UNC	2
	F3325	NUT, 1/2” UNC, Nylock	2
11	107853	ELBOW, 90 Degree, O-Ring	1
12	17652	ELBOW, 90 Degree, O-Ring	1
13	306043-02	HOSE	2

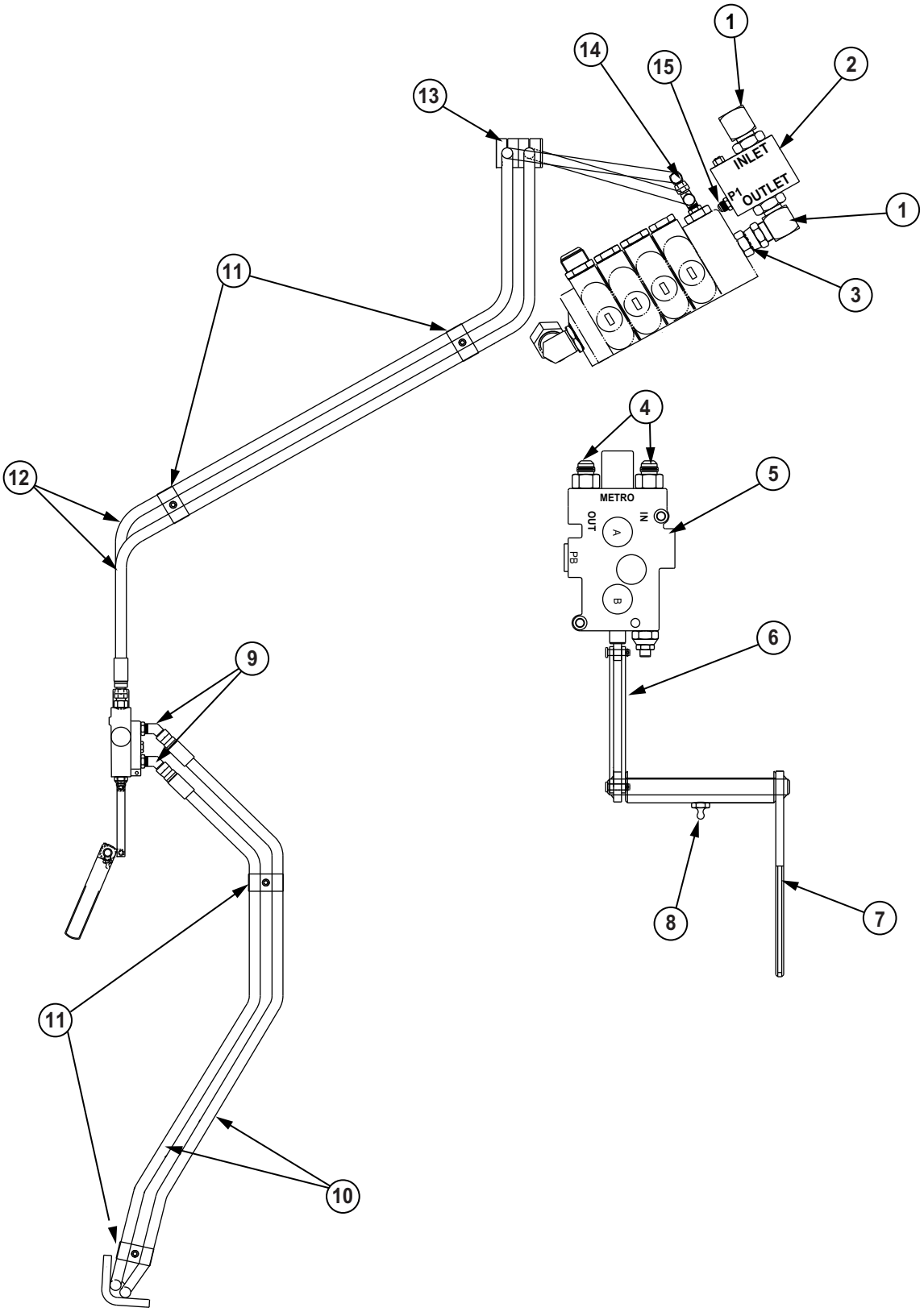
TIPPER HYDRAULICS - DUAL TIPPERS



TIPPER HYDRAULICS - DUAL TIPPERS

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	102719	ELBOW, 90 Degree, #16-20	2
2	603362	VALVE, Diverter, Dual	1
	306009-05	HOSE, Assembly, Main Supply (Not Shown)	1
3	5644-1616	ADAPTER, #16	1
4	104844	CONNECTOR, #6-6	2
5	102865	VALVE, Directional Control	2
6	605070	LINK, Spool Lever	4
	2722-0302	PIN, Clevis	4
	F6670	PIN, Cotter, 1/16” X 3/4”	4
7	605061	WELDMENT, Lever, LH	1
	605062	WELDMENT, Lever, RH	1
8	17782	GREASE ZERK	2
9	106558	ELBOW, 45 Degree, #6	4
10	305438-02	HOSE, Assembly	4
11	100267-02	PLATE, Twin Weld	8
	209657-04	CUSHION, Twin, 3/4” OD (Set of Two)	8
	100268-02	COVER, Plate, Twin	8
	F0205	SCREW, Cap, 5/16” X 1 3/4” UNC	8
12	109048	HOSE, Assembly	4
13	107631-02	PLATE, Twin Weld	2
	107908-03	PLATE, Safety	4
	209656-03	CUSHION, Twin, 3/4” OD, Tube (Set of Two)	4
	107907-03	BOLT, Stacking	4
	107630-02	PLATE, Cover	2
	F0031	SCREW, Cap, 1/4” X 1 1/2” UNC	4
14	5615-0006	ELBOW, 90 Degree	3
	5632-0006	TEE, #6	1
	107076	PLUG, #16-6	1
15	104844	CONNECTOR, #6 - 6	2

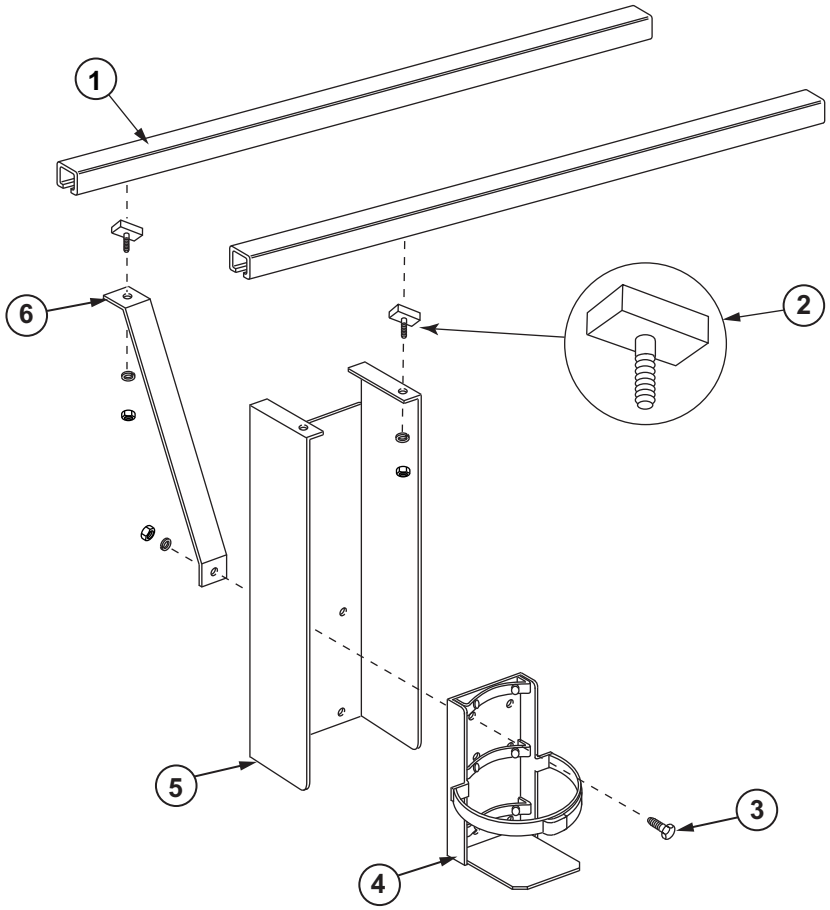
TIPPER HYDRAULICS - SINGLE TIPPER



TIPPER HYDRAULICS - SINGLE TIPPER

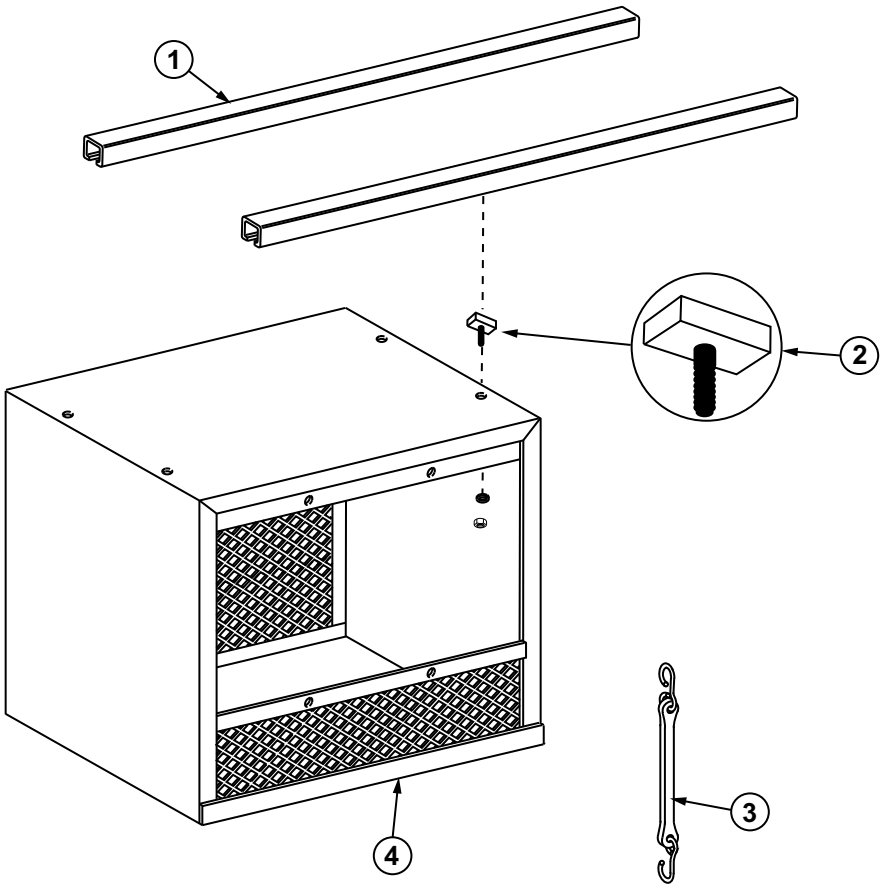
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	102719	ELBOW, 90 Degree, #16-20	2
2	603360	VALVE, Diverter, Dual	1
	306009-05	HOSE, Assembly, Main Supply (Not Shown)	1
3	5644-1616	ADAPTER, #16	1
4	104844	CONNECTOR, #6-6	2
5	102865	VALVE, Directional Control	1
6	605070	LINK, Spool Lever	2
	2722-0302	PIN, Clevis	2
	F6670	PIN, Cotter, 1/16” X 3/4”	2
7	605062	WELDMENT, Lever	1
8	17782	GREASE ZERK	1
9	106558	ELBOW, 45 Degree, #6	2
10	305438-02	HOSE, Assembly (For Right or Left Hand Tipper)	2
	305438-03	HOSE, Assembly (For Center Mount Tipper)	2
11	100267-02	PLATE, Twin Weld	4
	209657-04	CUSHION, Twin, 3/4” OD (Set of Two)	4
	100268-02	COVER, Plate, Twin	4
	F0205	SCREW, Cap, 5/16” X 1 3/4” UNC	4
12	109048	HOSE, Assembly	2
13	107631-02	PLATE, Twin Weld	1
	107908-03	PLATE, Safety	2
	209656-03	CUSHION, Twin, 3/4” OD, Tube (Set of Two)	1
	107907-03	BOLT, Stacking	2
	107630-02	PLATE, Cover	1
	F0031	SCREW, Cap, 1/4” X 1 1/2” UNC	2
14	5615-0006	ELBOW, 90 Degree	1
	107076	PLUG, #16-6	1
15	104844	CONNECTOR, #6 - 6	1

FIRE EXTINGUISHER OPTION



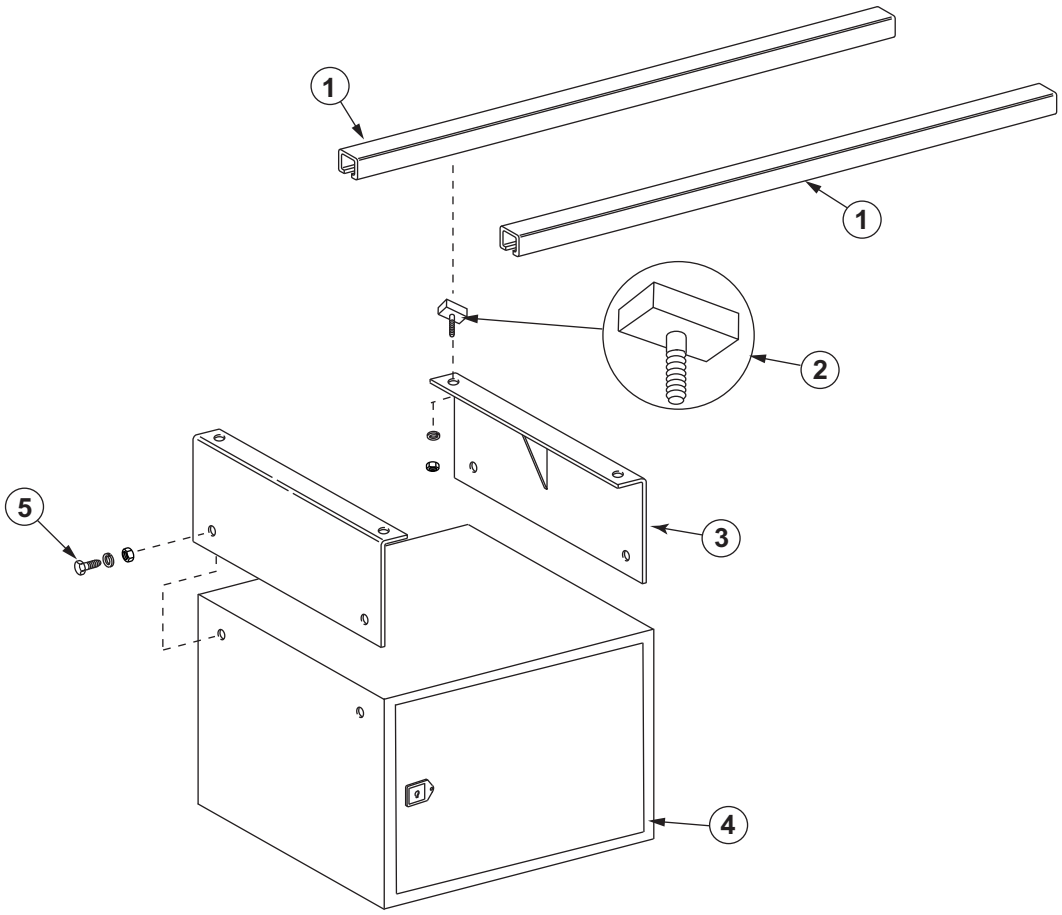
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	604840	CHANNEL, 15”	2
	604841	CHANNEL, 20”	2
	604842	CHANNEL, 21 1/2”	2
	604843	CHANNEL, 39”	2
2	605702	WELDMENT, T-Bolt	3
	F7325	WASHER, Flat, 7/16”	3
	F3190	NUT, Lock, 7/16” UNC	3
3	F0277	SCREW, Cap, 3/8” X 1” UNC	4
	F7875	WASHER, Flat, 3/8”	4
	F2975	NUT, 3/8” UNC	4
4	108172	BRACKET, Fire Extinguisher	1
	104507	EXTINGUISHER, Fire, 10 LB	1
	103641	EXTINGUISHER, Fire, 20 LB	1
5	604786	BRACKET, Extinguisher Mount	1
6	604866	SUPPORT	1

PAPER BASKET OPTION



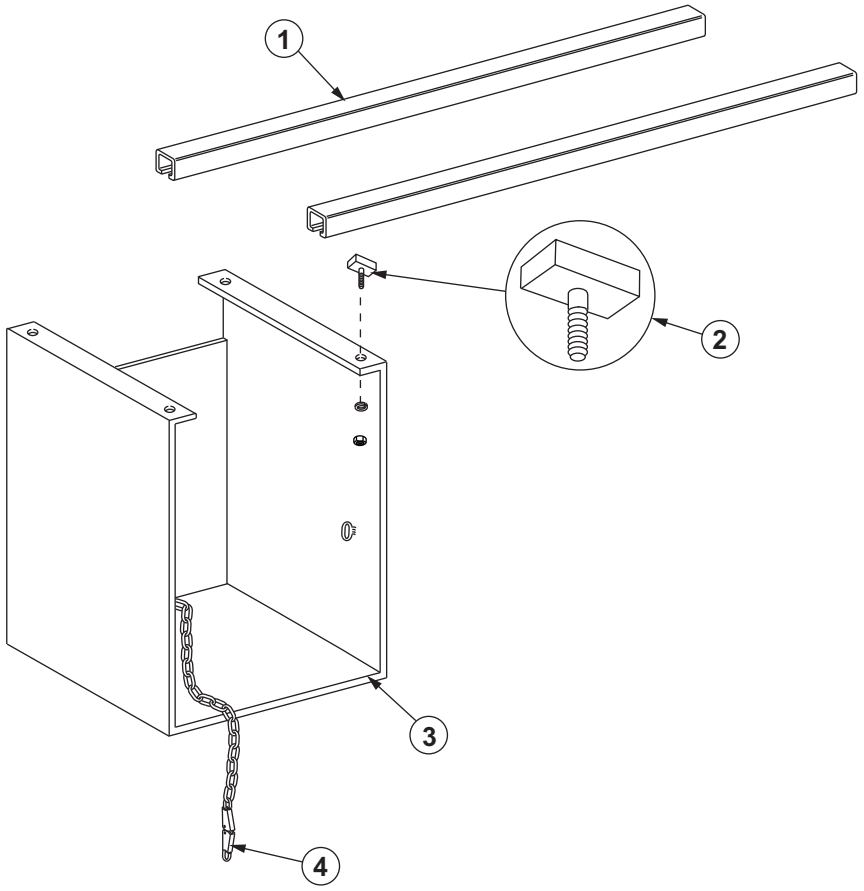
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	604840	CHANNEL, 15”	2
	604841	CHANNEL, 20”	2
	604842	CHANNEL, 21 1/2”	2
	604843	CHANNEL, 39”	2
2	605702	WELDMENT, T-Bolt	4
	F7325	WASHER, Flat, 7/16”	4
	F3190	NUT, Lock, 7/16” UNC	4
3	2846-0003A	STRAP	AR
4	405302	WELDMENT, Basket, 48”	1
	405304	WELDMENT, Basket, 35”	1

TOOL BOX OPTIONS



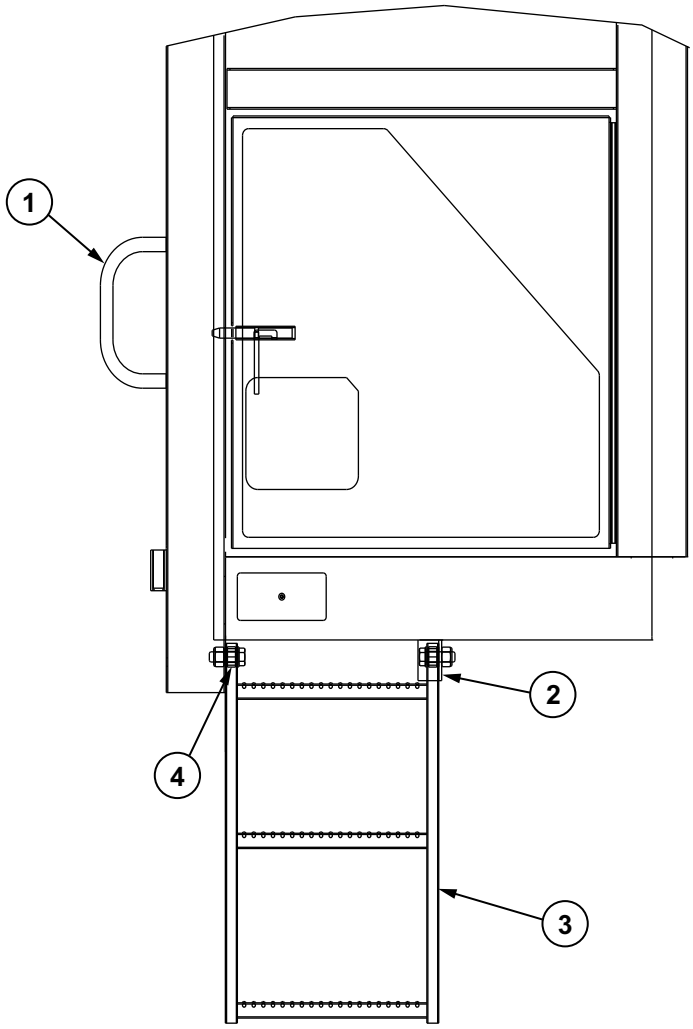
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	604840	CHANNEL, 15”	2
	604841	CHANNEL, 20”	2
	604842	CHANNEL, 21 1/2”	2
	604843	CHANNEL, 39”	2
2	605702	WELDMENT, T-Bolt	4
	F7325	WASHER, Flat, 7/16”	4
	F3190	NUT, Lock, 7/16” UNC	4
3	605215	BRACKET, Tool Box Mount	2
4	601066	BOX, Tool, 24”	1
	601068	BOX, Tool, 36”	1
5	F0910	SCREW, Cap, 1/2” X 1” UNC	4
	F7975	WASHER, Lock, 1/2”	4
	F3350	NUT, Hex, 1/2” UNC	4

WATER COOLER HOLDER OPTION



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	604840	CHANNEL, 15”	2
	604841	CHANNEL, 20”	2
	604842	CHANNEL, 21 1/2”	2
	604843	CHANNEL, 39”	2
2	605702	WELDMENT, T-Bolt	4
	F7325	WASHER, Flat, 7/16”	4
	F3190	NUT, Lock, 7/16” UNC	4
3	35384	WELDMENT, Water Cooler Holder	1
4	104172	HOOK, Double End Snap Lock	1

SIDE LADDER OPTION



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	15251	HANDLE, Grab	1
2	601302	BRACKET, Ladder	1
3	601303	WELDMENT, Ladder	1
	F1780	SCREW, Cap, 3/4” X 2 1/2” UNC	2
	F7475	WASHER, Flat, 3/4”	2
	F3675	NUT, Nylock, 3/4” UNC	2

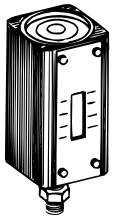
SECTION 10

SERVICE TOOLS

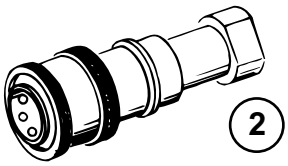
GENERAL

The Service Tools shown in this section will be required for some service and repair procedures. These tools are available from your local authorized Leach Distributor.

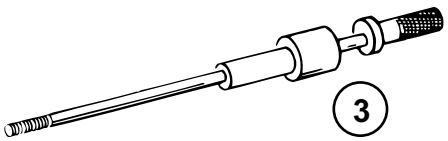
The actual use of each tool is described in Section 9, Service and Repair, of the appropriate service manual.



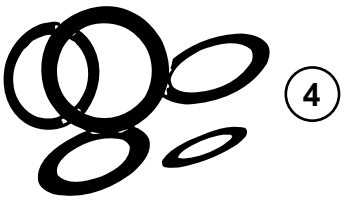
1



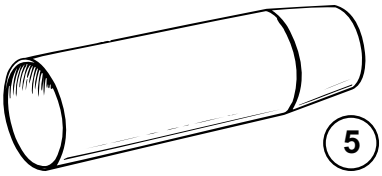
2



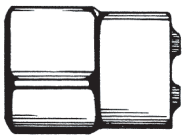
3



4



5



6

SERVICE TOOLS

NO.	PART NO.	DESCRIPTION	EXPLANATION
1	30522	Pressure Gauge	To Measure System Pressure
2	100368	Snap Connector	Quick Coupling For Pressure Gauges
3	T-SK-793-100-3	Pin Puller	Remove Pivot Pins
4	103081	O-Ring Kit	Various Size O-Rings
5	T-SR-9541-20	Pump Shaft Seal Tool	Install Seal
6	970004	Plunger Tool	Remove/Install Spring Loaded Plungers On Rear Loader Container Attachments
Not Shown	900015	Test Block	To Test Packer Section Circuit Relief

LEACH®
COMPANY

CUSTOMER SUPPORT MANUAL/LITERATURE ORDER FORM

SHIP TO:

_____
_____
_____
_____

LEACH INTERNAL USE ONLY
ORDERED BY:
DATE ORDERED:
DATE SHIPPED:

NO.	TITLE	QTY.
Current Production Units		
2RII		
105313	2RII PARTS, OVER 16000	_____
105318	2RII SERVICE, OVER 16000	_____
105319	2RII OPERATORS., OVER 16000	_____
ALPHA/BETA/DELTA		
105325	PARTS, OVER 3500	_____
105282	SERVICE, OVER 3500	_____
105283	OPERATORS, OVER 3500	_____
951134-5	ALPHA COLOR SPECIFICATIONS	_____
9511134-8	BETA COLOR SPECIFICATIONS	_____
9511134-7	DELTA COLOR SPECIFICATIONS	_____
9603134-2	AL/BE SUGGESTED SPECS	_____
9603134-3	DELTA SUGGESTED SPECS	_____
Other Publications		
105305	2" LEACH BINDER	_____
105309	REARLOADER PRE-OP GUIDELINE	_____
105308	ALL REARLOADER PARTS, SERVICE AND OPERATORS CD-ROM	_____
42495293	PAINT COLOR CHART	_____
961134-5	LEACH COLOR SPECIFICATIONS	_____
9603134-1	LEACH SUGGESTED SPECIFICATIONS	_____
105286	REARLOADER MOUNTING MANUAL	_____
105321	REARLOADER CONTAINER HANDLING SYSTEMS	_____
105605	CHASSIS REQUIREMENTS MANUAL	_____

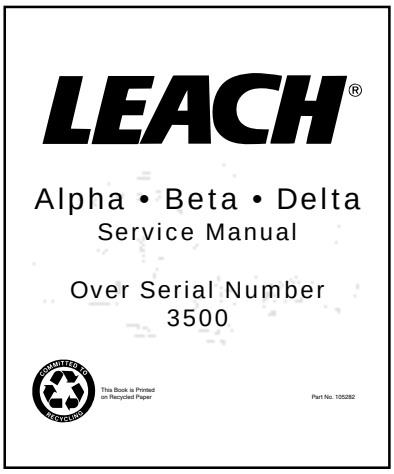
NO.	TITLE	QTY.
Previous Production Units		
105291	2RII PARTS, 9719-16000	_____
105615	2RII SERVICE, 9719-16000	_____
105546	2RII PARTS, 8993-9718	_____
105549	2RII SERVICE, 8993-9718	_____
105567	2RII PARTS, 6972-8993	_____
105544	2RII SERVICE, 6972-8993	_____
105600	2RII PARTS, 0001-6972	_____
105601	2RII SERVICE, 0001-6972	_____
105557	ALPHA PARTS, 2140-3500	_____
105556	ALPHA SERVICE, 2140-3500	_____
105565	BETA PARTS, 0001-2139	_____
105563	BETA SERVICE, 0001-2139	_____
105295	MILLENIUM PARTS	_____
105297	MILLENIUM SERVICE	_____
105296	MILLENIUM OPERATORS	_____
105616	FL-104 SERIES B PARTS	_____
105596	FL-104 SERIES B SERVICE	_____
105590	SAFETY BOOKLET	_____
LSAFE	SAFETY WALL POSTERS(6 PER SET)	_____

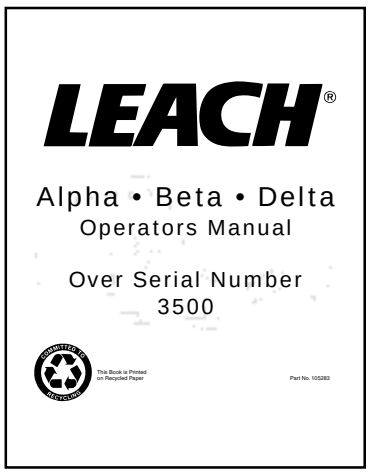
Send this form by Fax or Mail to:

Leach Company
Attention Service Department
P.O. Box 2608
Oshkosh, WI 54903-2608

Fax: (920) 231-2712

REWARD!





One genuine Leach hat to the first person to notify us of an error in any of our publications!

If you find what you believe to be an error in any of our publications, please complete the requested information and return the form to us by fax or mail. If you are the first, you will receive a hat by return mail.

I believe I found an error:

In the _____manual

Part No. _____

Page(s) _____

It should say _____

Name _____

Address _____

City, State, ZIP Code _____

Thanks for your help!

Return this form to:
Leach Company Service Department
P. O. Box 2608
Oshkosh, WI 54903-2608
Fax (920) 231-2712

2737 Harrison Street
Oshkosh, Wisconsin 54901
(920) 231-2770
(920) 231-2712 FAX
Please visit our website:
www.LeachUSA.com

PRINTED IN U.S.A.

© March 8, 2002
Part Number 105325